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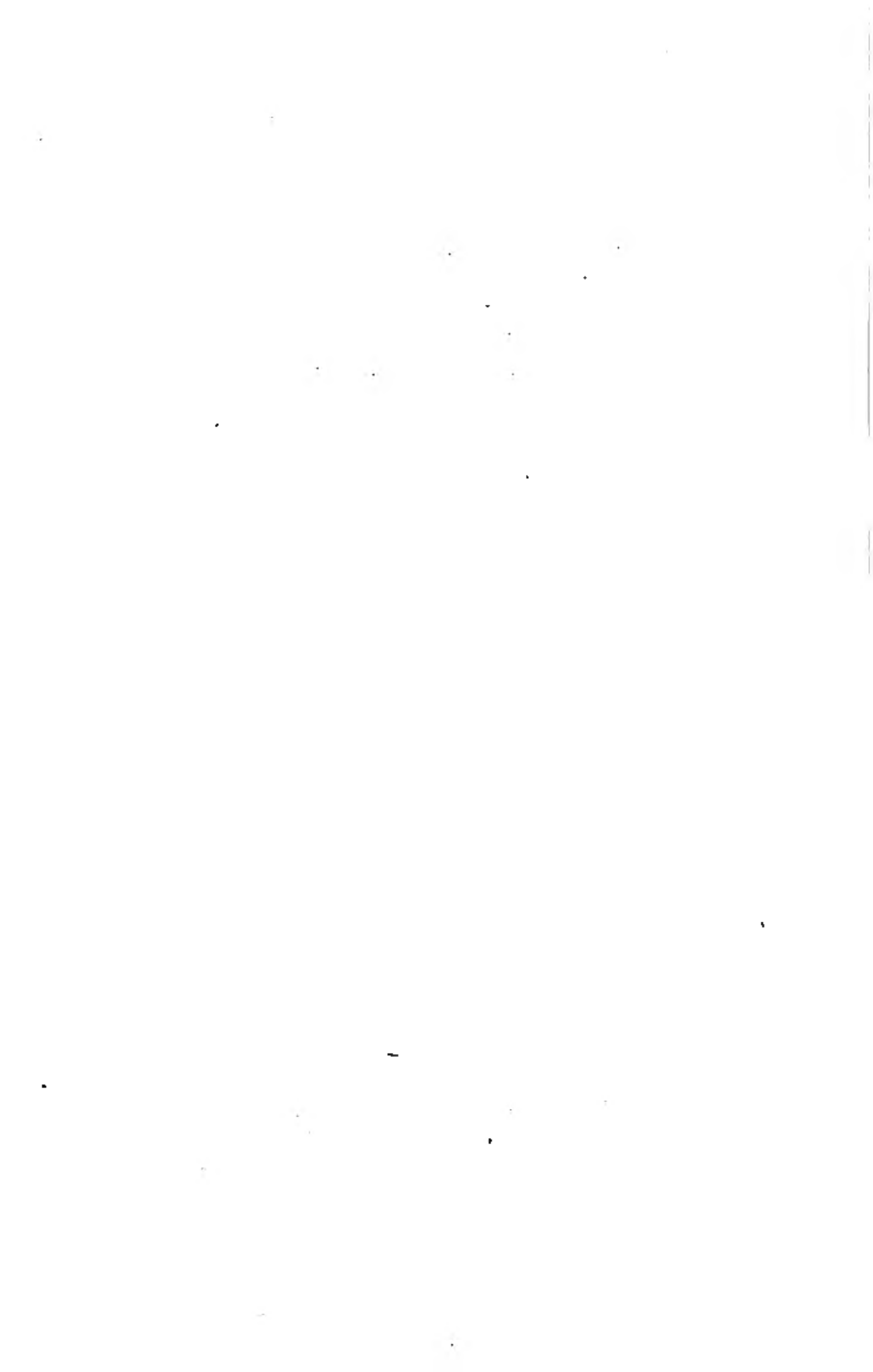
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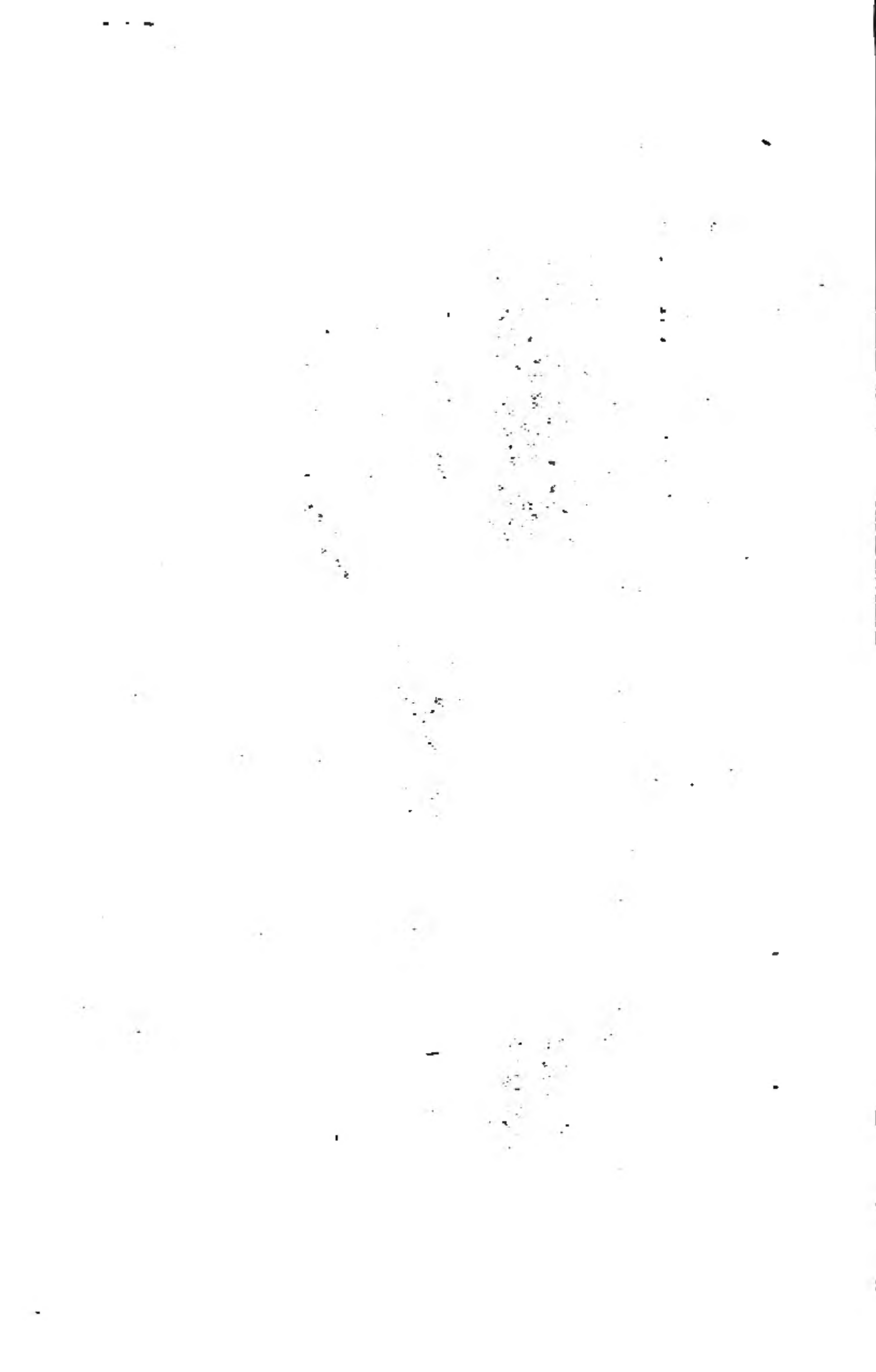
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THE PLAINS.





THE
FROZEN ZONE
AND ITS
EXPLORERS.

HARTFORD
R. W. BLISS AND COMPANY.

1886.

THE FROZEN ZONE

AND

ITS EXPLORERS:

A COMPREHENSIVE HISTORY OF

VOYAGES, TRAVELS, ADVENTURES, DISASTERS, AND DISCOVERIES

IN THE

ARCTIC REGIONS,

INCLUDING

RECENT GERMAN AND SWEDISH EXPEDITIONS; CAPTAIN NARE'S ENGLISH
EXPEDITION; PROF NORDENSKIÖLD'S DISCOVERY OF
A NORTH-EAST PASSAGE; THE SAILING
OF THE JEANNETTE,
ETC.,

WITH GRAPHIC DELINEATIONS OF

LIFE AND NATURE IN THE REALMS OF FROST.

Illustrated with One Hundred and Seventy-five Engravings and Maps.

WRITTEN, AND COMPILED FROM AUTHENTIC SOURCES,

BY

ALEXANDER HYDE, A. M., REV. A. C. BALDWIN,
AND
REV. W. L. GAGE.

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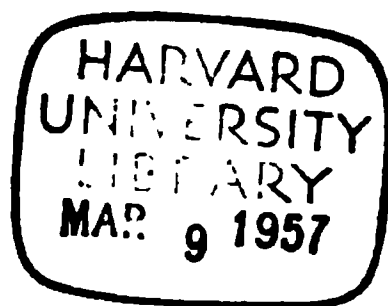
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INTRODUCTION.

THE Arctic Regions, cold, dreary and desolate, have been the theatre of the most heroic exploits and daring adventures the world has ever seen. Here the genius of such men as Parry, Ross, Franklin, Kane, Hayes, Hall, Payer, Markham, Nares, Nordenskiöld, and DeLong has found ample scope for development; and a taste of the perils and hardships of the Frozen Zone only served to incite them to new encounters. No vision of "sunny fountains rolling down their golden sands," or ambition for conquest and usurped power filled their minds; but the love of adventure, the advancement of science, and the holier impulses of humanity, were the lodestones which drew them toward the Pole.

To chronicle faithfully and in an attractive manner the brilliant achievements of these adventurous spirits, and to present, incidentally, graphic pictures of Life and Nature in the Realms of Frost, is the object of this book. In it, culled from scores of volumes of Arctic literature, are condensed the fascinating records of a thousand years. While no important expedition, nor even the experience of whalers, has been overlooked, prominence has been given to the most interesting ones, and when practicable the story is told in the explorers' own words.

**"At her feet the Frozen Ocean, round her head the Auroral Lights,
In her bride-veil, fringed with icicles and of the snow-drift spun,
Sits the White Ladye of the Pole, still waiting to be won.**

**What suitors for her palace gates have hoisted daring sail,
Though eye of man has never seen the face behind the veil!
So long sighed for, so hard served for, as this Queen, was never none,
Since the days of brave adventure and true service first begun.**

**But still the white Witch-Maiden that sits above the Pole,
In the snow-bound silence whose cold quells aught but soul,
Draws manly hearts with strange desire to lift her icy veil;
The bravest still have sought her, and will seek, whoever fail."**

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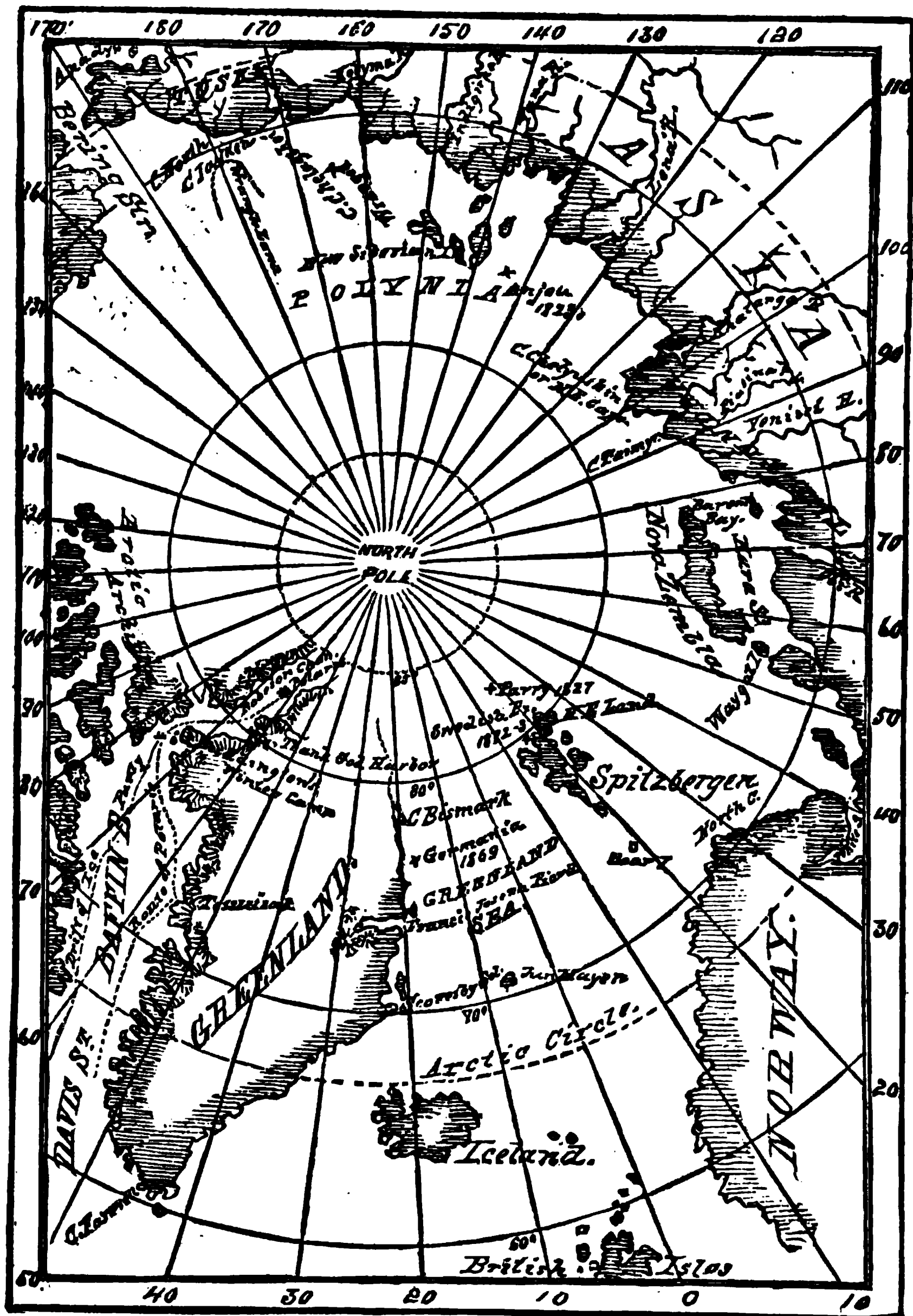
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A SKETCH OF THE LIFE OF
ELISHA KENT KANE, M. D., U. S. N.,

BY

PROF. CHARLES W. SHIELDS, D. D., OF PRINCETON COLLEGE, N. J.

THE Life of Dr. Kane is already a fireside tale. Every one is familiar with it as the story of a young knight-errant of philanthropy and science, who traversed nearly the whole surface of the globe, within the short period of fourteen years; who gathered here and there a laurel from every walk of physical research in which he strayed; who plunged into the thick of perilous adventure, abstracting in the spirit of philosophy, yet seeing with the eye of poesy, and loving with the heart of humanity; who penetrated, under such impulses, even to the Northern pole of the planet and remained secluded amidst the horrors of two Arctic winters; who returned like one come back from another world, to invest the very story of his escape with the charms of literature and art, and transport us, by his graphic pen, into scenes we scarcely realize as belonging to the earth we inhabit; and who died at length, in the flush of his manhood and the morning of his fame, lamented by his country and the world.

To write the story of such a life as it should be written, would be impossible within the limits assigned to this memoir, and nothing more, therefore, will be here attempted than such a sketch as may serve to introduce this new edition of his works to the reader. As we trace the usual biographical themes, though in the briefest manner, it will be found that his origin and education, the leading events in his career, the prominent traits of his character, his public services, and his private life and last moments, together yield an impression which is suited at once to justify his fame and perpetuate the lessons he has left to the world.

ELISHA KENT KANE, the leader in the American search for Sir John Franklin, was born in Philadelphia, Feb. 3, A. D. 1820. He received the name of his grandfather, who had himself been named after his maternal grandfather, the Reverend Elisha Kent, of "Kent's Parish," N. Y., and he was baptized by his uncle, the Reverend Jacob J. Janeway, D. D., then pastor of the Second Presbyterian Church, which his parents attended.

On the father's side he was descended from Colonel John Kane, of the British Army, his great-grandfather, who came from Ireland to the colony of New York about the year 1756, retired to Dutchess County, and there married Miss Sybil Kent, daughter of the clergyman above named, and aunt of Chancellor Kent. His grandfather, Elisha K. Kane, was a successful merchant in Albany and New York, who married Miss Alida Van Rensselaer, daughter of General Robert Van Rensselaer, of Claverack, and subsequently removed to Philadelphia. His father, the late Hon. John K. Kane, a graduate of Yale College, and successively a member of the Philadelphia bar, Attorney-General of the State, and Judge of the United States Court for the Eastern District of Pennsylvania, was well known as an acute and learned jurist within his profession, as an influential statesman of the old school of politics, an active promoter of the arts, sciences, and charities in Philadelphia, an accomplished scholar in classical and English literature, and a courtly gentleman in society. And the culture, efficiency, and tact which distinguished him in every relation of life were not wanting in his honored son.

On the mother's side he was descended from Thomas Leiper, a younger son of a Scotch family of French origin, who came in search of fortune about the year 1764, to the colony of Virginia, and thence to Pennsylvania; built extensive mills near Philadelphia; aided in forming the First City Troop, and served with distinguished gallantry in the battles of Trenton and Princeton; united, after the war, with his warm personal friend, President Jefferson, in organizing the political party which looked to him for its leader; and as a zealous advocate of public improvements, laid down the first experimental railway constructed in the United States. He married Miss Elizabeth Coltas Gray, the daughter of the Hon. George Gray, of Gray's Ferry, and of Martha Ibbetson Gray, whose generous services in nursing the sick and wounded prisoners during the occupation of Philadelphia by Lord Howe, attracted public testimonials from both parties. Their daughter, Jane Duval Leiper, as Mrs. Kane, illustrated the traits proverbial in the mothers of great men by combining with the virtues of the Spartan

matron, that energy, nerve, elasticity, and warm-heartedness which became famous in her son.

On both sides, his ancestry in this country, it will be seen, dates before the American Revolution, being derived in the paternal line from Ireland, Holland, and England, and in the maternal line from Scotland, England, and France, while the corresponding religions blended in it were the Episcopalian, Dutch Reformed, and Congregational, with the Presbyterian, Quaker, Methodist, and Moravian. And the names which it embraces are here mentioned, not merely because he has himself written them, with a just pride, upon the map of the Arctic seas, but also as serving to explain that rare combination of varied and even opposite elements of race, of creed, and of culture, which entered into the formation of his character.

When Mr. Kane and Miss Leiper first met, they were in the prime of youthful strength and beauty; and after a courtship, the romance of which has become a family tradition, they were married, April 20, 1819. Elisha was the eldest of their children. Three other sons and a married daughter are still living.

In Dr. Kane, as in most men who achieve greatness, the boy foreshadowed the man. Arctic explorations were prefigured by juvenile feats of daring and contrivance. His biographer relates that when but a child, he scaled the roof by moonlight with his younger brother, while the family were asleep, feeling repaid for the perilous adventure by the "grand view" from the chimney-top. Traits which afterwards shone out before the world, already appeared in the school-room and on the playground, where he became a spirited little champion of the weak and oppressed, repelling imposition from any quarter with uncalculating courage, and yet as quick to forgive as to resent an injury. His tastes, too, began to show the bias of coming years. He had his own small cabinet of minerals, birds, and insects, and his chemical laboratory, the latter to the frequent alarm of the household—and his favorite books were Robinson Crusoe and Pilgrim's Progress.

But if it is easy now to trace the beginnings of his career, it was not so easy then to forecast it. Fonder of sports than of books, full of generous but ill-regulated impulses, and impatient of control, his course as yet was like that of a mountain torrent which has not found and made its channel; and it was only when he began by his own efforts to retrieve his neglected education, that parental anxiety was relieved.

His father would have had him follow in his own footsteps at Yale; but his inclination was more towards science than learning, and the

optional course of study which the University of Virginia allowed, was found better adapted to his somewhat exceptional genius. He was in his seventeenth year when he entered the university, and during the year and a half that he studied there, made good progress in the classical and mathematical course prescribed, as well as in his own chosen sciences of chemistry, mineralogy, geology, and civil engineering. It was at this time he said to his cousin that he "intended to make his mark in the world." And the resolution seems to have derived impulse from an event which abruptly ended his collegiate course a little before the time of graduation. Prostrated by an acute rheumatism of the heart, he was wrapped in a blanket and taken by slow journeys home to Philadelphia, where he endured frightful paroxysms of pain, and for days appeared to be on the brink of death. He recovered, to learn from his physicians that he might fall as suddenly as by a musket shot. The decision with which he went back to the duties of life was only anticipated by his father's counsel: "Elisha, if you must die, die in harness."

Turning from the profession of a civil engineer to that of a physician, in his nineteenth year, he was matriculated in the Medical Department of the University of Pennsylvania, and after attending one course of lectures, while yet an undergraduate, he was elected one of the Resident Physicians in the Hospital at Blockley. His preceptors and associates have all publicly spoken of the remarkable zeal and success with which he prosecuted his studies and performed his duties in these positions. Indeed his graduating thesis on the subject of "Kystein" was so highly esteemed that it was published by a vote of the Faculty, and attracted the general notice of the profession. It is still quoted as an authority both in this country and abroad.

It had become plain that Dr. Kane's cardiac disorder combined with his scientific tastes and aspirations to unfit him for the routine life of a practitioner, and that travel, adventure, and incessant activity were with him a physical need as well as a moral impulse. He had no taste for the social blandishments under which young men born to ease and elegance too often waste their prime, and the stagnant political condition of the country at that time afforded none of the generous careers which have since been opened to them. Neither could he accept for himself the fate of a mere invalid tourist or reckless adventurer, intent on crowding into a short lifetime the utmost amount of mere aimless diversion. There must, if possible, be a color of scientific enthusiasm to sanction his life of physical hardihood.

His father, acting upon this enlightened view of his case, applied for

him to the Secretary of the Navy for the post of surgeon in the service; and after passing the required examination so creditably that the disqualifying state of his health was overlooked by the Board of Examiners, he was appointed physician of the Chinese Embassy, which sailed in the frigate *Brandywine*, Commodore Parker, in May, 1843.

During the two years that he was absent upon this his first extended tour of travel, he made a complete circuit of the globe, sailing around the coast of South America, across the Pacific Ocean to Southern and Eastern Asia, and returning by the overland route through Europe, across the Atlantic to the United States. And that spirit of dauntless research which actuated him through life seems every where to have brought with it its own proper atmosphere of marvelous incident and peril.

While the vessel remained at Rio de Janeiro, after participating with the diplomatic corps in the coronation of the Emperor of Brazil, he visited the Eastern Andes for a geological survey of that region. At Bombay, where the legation awaited some months the arrival of its chief, Mr. Cushing, by the overland route, he seized the opportunity for similar inland journeys, exploring the caverned temples of Elephanta, traveling by palanquin to the less known ruins at Karli, passing over to Ceylon, and engaging, with some officers of the garrison, in the elephant hunt, and the other wild sports of the island. But it was at Luzon or Luconia, a Spanish possession in the China Sea, that this adventurous spirit, though under a scientific impulse, passed the limits of prudence in his far-famed exploration of the crater of Tael, a volcano on the Pacific coast of the island, in a region inhabited only by savages. Crossing over to the capital city of the island, during one of the long delays of Chinese diplomacy, he procured an escort of natives from the Archbishop of Manilla, (by means of letters from American prelates which he had secured before leaving home,) and in company with his friend Baron Loë, a relative of Metternich, penetrated across the country to the asphaltic lake in which the island volcano is situated. Both gentlemen at first descended together, until they reached a precipice overhanging the cavernous gulf of the crater, when the baron saw further progress to be impossible, but the doctor, in spite of the remonstrances of the whole party, insisted upon being lowered over the ledge by means of a rope made of bamboos, and held in the hands of the natives under the baron's direction, until he reached the bottom, two hundred feet below. Loosing himself from the cord, he forced his way downwards through the sulphurous vapors, over the hot

ashes, to the green, boiling lake, dipped his specimen-bottle into its waters, returned to the rope, several times stumbling, almost stifled, and with his boots charred, one of them to a coal, but succeeded in again fastening himself, and was hauled up by his assistants and received into their hands exhausted and almost insensible. Remedies brought from the neighboring hermitage were applied, and he was so far restored that they could proceed on their journey. But rumors spread before them among the pigmy savages on the island, of the profane invasion which had been made into the sacred mysteries of the Tael, and an angry mob gathered around them, which was only dispersed by one or two pistol shots and the timely arrival of the padres. The trophies of this expedition were some valuable mineral specimens, a bottle of sulphur water, a series of graphic views from recollection in his sketch-book, and a written description of the volcano by one of the friars, which, after many wanderings, was put in his hands as he sat at the home dinner-table, twelve years afterwards.

Resigning his post in the diplomatic mission, Dr. Kane practiced his profession in Whampoa, until he was sufficiently in funds to pursue his journey homeward through Calcutta by the overland route. After exploring the interior of India, including the Himalaya mountains, he was admitted with his friend, Mr. Dent, a British official, into the suite of Prince Tagore, one of the native Hindoo nobles, then on his way to the court of Queen Victoria, and traveled under this safe conduct through Persia and Syria, as far as Upper Egypt. At Alexandria he received, through an introduction by Prince Tagore to the Pasha Mehemet Ali, a special firman by which he was enabled safely to traverse the region of Egyptian ruins. But the journals of a large part of this expedition, as of the whole previous tour, were unfortunately lost by the upsetting of his boat in the Nile. In the ruined temple of Karnak he met with Professor Lepsius, the renowned Egyptologist, with whom he traveled some time, and at Luxor he proved that archæological research is sometimes more curious than effective, by climbing, as had never been done before, between the colossal knees of the statue of Memnon, in hopes of finding some hieroglyph on the under side of the tablet in the lap of the figure.

His sensitive organization, throughout life, seems to have reflected with peculiar intensity the disease of every country through which he traveled. As at Macao he had been prostrated by the rice-fever, so at Alexandria he was seized with an attack of the plague. When sufficiently recovered to pursue his journeyings, he set out for Greece, and made the tour of that classic land on foot. Athens, Platæa, Mount

Helicon, Thermopylæ, Parnassus, were successively visited, after which he passed to Trieste, and thence through Germany to Switzerland, where the glaciers of the Alps yielded him the ice-theories which he afterwards tested in the Arctic regions.

His design had been to return to Manilla, in the island of Luzon, with a license from the Spanish authorities to practice his profession; but failing in this, or relinquishing it, he at length yielded to urgent solicitations from home, and returned by way of Italy, France, and England, to the United States.

Dr. Kane was at this time twenty-four years of age, and had already developed the traits for which he was subsequently distinguished. The Reverend George Jones, chaplain to the Chinese Embassy, speaks of him as "then very youthful-looking, with a smooth face, a florid complexion, very delicate form, smaller than the common size; but with an elastic step, a bright eye, and great enthusiasm in manner, which also mixed itself with his conversation. He seemed to be all hope, all ardor, and his eye appeared already to take in the whole world as his own." And another of his associates in the diplomatic mission, Fletcher Webster, Esq., has said that "in social intercourse, although agreeable and very bright when called out, he still seemed to be thinking of something above and beyond what was present. To his great scientific taste and knowledge, and his energy and resolution, he added a courage of the most dauntless kind. The idea of personal apprehension seemed never to cross his mind. He was ambitious, not of mere personal distinction, but of achievements useful to mankind and promotive of science."

On his return to Philadelphia, he successfully devoted himself for a time to his profession, both as a teacher and practitioner of medicine, though being still a titular surgeon of the Navy, he had put his name on the roll as "waiting for orders." Accordingly, three weeks before the declaration of war against Mexico, in May, 1846, he was ordered to the coast of Africa, in the frigate *United States*, under Commodore Reed. When at Rio Janeiro in 1843, he had received, in return for professional services, from the famous Portuguese merchant, Da Sousa, introductory letters to his commercial representatives on the African coast, by means of which he now visited and examined the slave-factories; and while the frigate was in harbor, he also joined a caravan going to the interior, and was presented at the court of his savage majesty the king of Dahomey, where he became convinced that even the horrors of the middle passage were merciful compared with those from which its victims had been rescued.

From this comparatively inglorious field of the public service, Dr. Kane was transferred by a virulent attack of the coast-fever, which, after bringing him to the point of death, required his immediate return home. He reached Philadelphia utterly broken in health, but eager to mingle in the stirring scenes then passing in Mexico, from which he had been withheld during his ten months' absence. When scarcely yet convalescent, he hastened to Washington, obtained credentials as bearer of dispatches to General Scott, then in the Mexican capital, and after stopping in Kentucky to procure a horse, said by one of his colleagues to have been "the finest animal ever seen in Mexico," pursued his journey to New Orleans, and thence across the Gulf to Vera Cruz. It was while on his way to the interior that an affair occurred, the well-attested facts of which bring back the romance of chivalry as a reality.

Dr. Kane, having been unable to procure an American escort, had intrusted himself to a Mexican spy-company, under Colonel Domingues, and was approaching Nopaluca, when they encountered a body of contra-guerrillas, escorting Generals Gaona and Torrejon, with other Mexican officers. A short and severe contest ensued, resulting in the capture of most of the Mexican party. During the fray, the doctor's charger carried him between young Colonel Gaona and his orderly, who both fell upon him at the same moment. Receiving only a slight flesh hurt from the lance of the latter, he parried the sabre-cut of the former and unhorsed him with a wound in the chest. Soon afterwards cries came from young Gaona to save his father, the aged general, whom, together with the other Mexican prisoners, the renegade Domingues and his bandits were about to butcher in cold blood. Dr. Kane instantly charged among them with his six-shooter, and succeeded at length in enforcing humanity to the vanquished, though only after himself receiving a lance-thrust in the abdomen and a blow which cost him the loss of his horse. But still another act of mercy remained to be performed. As the old General sat beside his son, who was bleeding to death from his wound, the doctor, with no better surgical implements than a table-fork and a piece of pack-thread, succeeded in taking up and tying the artery, and thus saving the life which he had endangered.

The gratitude of the rescued Mexicans knew no bounds, and when it was found that their deliverer was himself suffering from his wounds, he was taken by General Gaona to his own residence, and there nursed for weeks by the ladies of the family, with every attention that wealth and refinement could suggest. A tissue of circumstantial as well as personal evidence has saved the chronicler of this incident the risk of

seeming a romancer. The published letters which passed between the American and Mexican governors of Puebla in regard to Dr. Kane, interchanged his praises; and on his return to Philadelphia, more than seventy of the most distinguished gentlemen of the city united in presenting him with a sword, as a memorial of "an incidental exploit which was crowned with the distinction due to gallantry, skill, and success, and was hallowed in the flush of victory by the noblest humanity to the vanquished."

After the Mexican war, in January, 1849, Dr. Kane was attached to the storeship *Supply*, Commander Arthur Sinclair, bound for Lisbon, the Mediterranean, and Rio Janeiro. The diseases which he had successively contracted in China, Egypt, Africa, and Mexico, had made sad inroads upon his health, and the voyage, though without much of incident, at least served to recruit his strength. He was next assigned to the Coast Survey, and had settled into its round of duty, when he was suddenly called to the great work of his life.

"On the 12th of May," he writes, "while bathing in the tepid waters of the Gulf of Mexico, I received one of those courteous little epistles from Washington which the electric telegraph has made so familiar to naval officers. It detached me from the coast-survey, and ordered me to proceed forthwith to New York for duty upon the Arctic expedition." For months before, the civilized world had resounded with the cry to the rescue of Sir John Franklin, and the Government, moving in sympathy with the whole country, had resolved upon sending in search of the lost navigator the two vessels, the "*Advance*" and "*Rescue*," under Commander De Haven. Dr. Kane, who had repeatedly volunteered his services, was made senior medical officer and naturalist of the expedition, and on his return, published its history in the form of a "*Personal Narrative*," collected from his private journals. The cruise lasted during sixteen months, but resulted in little more than the discovery of Sir John Franklin's first winter quarters and the graves of three of his men.

In proceeding to organize the second United States Grinnell Expedition under his own command, Dr. Kane had before him an object worthy of his matured powers and noblest aims, and gave himself to the task with the zeal of a votary. But what discouragements, what disappointments, and what difficulties entered into that great undertaking from its outset to its close, can be but partially seen through the veil of delicate reserve which he has thrown over them. Something, however, may be learned in regard to them from another source, and upon authority as competent as it is disinterested and honorable.

Captain Sherard Osborne, of Her Majesty's Navy, in a paper advocating further polar exploration, holds the following language :—

“It is only fair to Dr. Kane to say, that never in our times has a navigator entered the ice so indifferently prepared for a Polar winter. With only seventeen followers, two of them mutineers, without a steam-power for his solitary vessel, without proper sledge-equipment, without any preserved fresh meat, and a great insufficiency of preserved vegetables, and with only coals enough to serve for twelve months' fuel, the only marvel to me is, that he ever returned to relate his sufferings. They are only to be equaled by those of the navigator “James,” in Hudson Bay, two centuries earlier. God forbid that I should be thought to cast one reflection upon those warm-hearted Americans who came nobly forward and said, “We too will aid in Arctic enterprise ;” but the fact is that enthusiasm and high courage, without proper knowledge and equipment, on such service, infallibly lead to the suffering which Dr. Kane's followers endured ; and it is *that* which best explains how it was, that whilst our sailors, far beyond the Esquimaux, waxed fat and fastidious, Kane's poor followers had to eat the raw flesh of animals to avert the ravages of scurvy, brought on by a poisonous dietary of salt meat. This much to meet the objections of those who point to Dr. Kane's thrilling narrative with a view to frighten us from Arctic exploration ; and I may add, that I know well that chivalrous man never penned those touching episodes to frighten men from high enterprise, but rather to caution us to avoid his mistakes, and to show us how nobly the worst evils may be borne when the cause is a good one.”*

The narrative of that expedition is before the reader in this volume. When first given to the world, it excited an intense interest and drew forth universal eulogy. All classes were penetrated and touched by the story so simply, so modestly, so eloquently told. Autograph letters from the most eminent names in every walk of life were written in its praise. Medals and other costly testimonials were sent by the Queen of England, by different Legislatures in our own country, and by scientific associations throughout the world. The mere casual notices of the press, as collected by his friend Mr. Childs, the publisher, fill several albums of folio size.

But the recipient of these honors was not destined himself long to enjoy them. To the seeds of former diseases never fully eradicated, had been added that terrible scourge of Arctic life, the scurvy, together

* Paper on the Exploration of the North Polar Region, read before the Royal Geographical Society, Jan. 23d, 1865, by Captain Sherard Osborne, R. N., C. B.

BOAT IN HAVANA WHERE DR. KANE DIED.

with the exhausting literary labors incident to the publication of this narrative. Entirely underestimating those labors, (of which indeed but few can form an adequate conception,) he had been quite too thoughtless of the claims of a body he had so long been accustomed to subject to his purpose, and only awoke to a discovery of the error when it was too late. With this melancholy conviction, he announced the completion of the work to a friend in the modest and touching sentence:—"The book, poor as it is, has been my coffin."

He left the country for England under a presentiment that he should never return. For the first time in his life, departure was shaded with foreboding. It was indeed an alarming symptom to find that iron nerve which hitherto had sustained him under shocks apparently not less severe, thus beginning to falter; and yet even then the great purpose of his life he had not wholly abandoned, but, in spite of the most serious entreaties, was already projecting another Arctic Expedition of research and rescue.* Before, however, he could make known his plans, or even receive the honors awaiting him, successive and more virulent attacks of disease obliged him, under medical advice, to seek the last resorts of the invalid. Attended by his faithful friend Morton, he sailed for Cuba, where he was joined by his mother and two of his brothers, and devotedly nursed during a lingering and painful illness, until his death on the 16th of February, 1857.

No man of his age was ever more proudly and tenderly lamented. The journey with his remains from Havana to New Orleans, and thence through the Western States to Philadelphia, became but one long funeral triumph, with the learned, the noble, and the good mingling in its train. State and civic authorities, literary, scientific, and religious bodies, followed his bier from city to city with lavish shows of grief, until at length the national obsequies were completed in the Hall of Independence, in the church of his childhood, and at the grave of his kindred.

Dr. Kane, so far from being one of those mere personages who move in a halo of applause, had only to be known in order to convert the coldest criticism into sympathy with the popular feeling. Whatever faults belonged to him—and his nature was too rich and strong to be without them—yet the man himself was fully worthy of his mission, and had been actually endowed with gifts and traits quite as remark-

* The particular project to which he then reverted with special interest, was one which he had entertained in 1852, looking to a combined land and sea expedition down Mackenzie's River, and through Behring's Straits. See Paper on Alaska, lately read by his brother and literary executor, General T. L. Kane, before the American Geographical Society.

able as any of the circumstances which conspired to make him an object of such general admiration.

When at his prime, before disease had begun to waste his frame, his personal appearance was extremely youthful and handsome, almost to the degree of a feminine delicacy of form and feature, with an air of elegance and fashion, suggestive at first sight of anything but hardy exploits and physical endurance. But as his character matured, the lines of his face revealed the energy and purpose within. There was a certain *presence* which diverted attention from his deficient stature.

Temperate in meat and drink, he had none of the small vices which deprave the body, but was rather in danger of neglecting, or overtasking it, by the reckless energy with which he subjected it to his behests. The stimulus with which he repaired the waste of mental application was natural rather than artificial. He would leave the manuscripts of his book, to seek relaxation in a midnight ride upon his favorite stallion "Gaona," or in a rapid walk before breakfast. He was a splendid horseman and marksman. In the excitements of the chase he had the keenest relish, and yet for suffering animal creatures often showed a tenderness that in another might have seemed sentimental.

Natural scenery and objects he surveyed with the eye of an artist as well as that of trained scientific observation. His journals in all parts of the world were filled with sketches, some of them finished pictures, others mere pen-and-ink outlines with verbal notes. "Could they be placed before the public," says the artist who illustrated this work, "they would add still further, if that were possible, to his reputation as an Arctic explorer."

His affections for home and kindred were absolute passions. In his love for his mother especially, he was a child to the last. His imagination strove to brighten even the Arctic waste with dear and familiar associations. The ice-bound harbor in which he was imprisoned was made to echo with names oftenest heard at home. He was really prouder to call a new land or river after one of his own kinsmen, than to christen it for a Washington or a Tennyson; and the sledge in which he sought the object of a world-wide fame was most precious in his eyes as a memorial of his brother "Little Willie."

His heart, indeed, was as warm as it was large and noble. No elevation and vastness in his schemes of philanthropy, no absorption in their pursuit, and no reputation gained by their success, ever made him insensible to the claims of the humblest upon its regards. Throughout life he had numerous dependants who looked to him for relief and maintenance, and at every step he performed acts of kindness with an

uncalculating generosity. In one of his voyages he saved the life of an infant whose mother was too ill to nurse it, by himself taking entire charge of the little sufferer. A young orphaned midshipman, with whom he read the Bible and Shakspeare on the voyage to Brazil, when found to be dying of consumption, was taken home with him and tenderly nursed until his death as one of the family. It would have been strange if such affluent affection had not been, in some instances, lavished upon an unworthy object, as when a young culprit whom he sought to reform by bringing him under the home influences, was suddenly missing with some valuable jewelry. But that knightly romance and simplicity tinging his ardent nature, if ever quixotic in the eyes of the prudent, could never have exposed him to the serious misapprehension of any but inferior souls.

The writer of this sketch, as the eulogist at the obsequies of Dr. Kane, gave an expression of the public estimate which has since been only confirmed by his more intimate knowledge, and he can not now do better than here to reproduce so much of it as relates to his moral traits and achievements.*

“As a votary of science, he will indeed receive fitting tributes. There will not be wanting those who shall do justice to that ardent thirst for truth, which in him amounted to one of the controlling passions; to that intellect so severe in induction, yet sagacious in conjecture; and to those contributions, so various and valuable, to the existing stock of human knowledge. But his memory will not be cherished alone in philosophic minds. His is not a name to be honored only within the privileged circles of the learned. There is for him another laurel, greener even than that which science weaves for her most gifted sons. He is endeared to the popular heart as its chosen ideal of the finest sentiment that adorns our earthly nature.

“Philanthropy, considered as among things which are lovely and of good report, is the flower of human virtue. Of all the passions that have their root in the soil of this present life, there is none which, when elevated into a conscious duty, is so disinterested and pure. In the domestic affections, there is something of mere blind instinct; in friendship, there is the limit of congeniality; in patriotism, there are the restrictions of local attachment and national antipathy; but in that love of race which seeks its object in man as man, of whatever kindred, creed, or clime, earthly morality appears divested of the last dross of selfishness, and challenges our highest admiration and praise.

* See Report of the Joint Committee appointed to receive the remains and conduct the obsequies of the late Elisha Kent Kane, in Dr. Elder's Biography. Funeral Discourse delivered in the Second Presbyterian Church.

“Providence, who governs the world by ideas, selects the fit occasions and men for their illustration. In an age when philanthropic sentiments, through the extension of Christianity and civilization, are on the increase, a fit occasion for their display is offered in the perils of a bold explorer, for whose rescue a cry of anguished affection rings in the ears of the nations; and the man found adequate to that occasion is he whose death we mourn.

“If there was every thing congruous in the scene of the achievement,—laid, as it was, in those distant regions where the lines of geography converge beyond all the local distinctions that divide and separate man from his fellow, and among regions of cold and darkness, and disease and famine, that would task to their utmost the powers of human endurance—not less suited was the actor who was to enter upon that scene and enrich the world with such a lesson of heroic beneficence. Himself of a country estranged from that of the imperiled explorers, the simple act of assuming the task of their rescue was a beautiful tribute to the sentiment of national amity; while, as his warrant for undertaking it, he seemed wanting in no single qualification. To a scientific education and the experience of a cosmopolite, he joined an assemblage of moral qualities so rich in their separate excellence, and so rare in their combination, that it is difficult to effect their analysis.

“Conspicuous among them was an exalted, yet practical *benevolence*. It was the crowning charm of his character, and a controlling motive in his perilous enterprise. Other promptings indeed there were, neither suppressed, nor in themselves to be depreciated. But that passion for adventure, that love of science, that generous ambition, which stimulated his youthful exploits, appear now under the check and guidance of a still nobler impulse. It is his sympathy with the lost and suffering, and the duteous conviction that it may lie in his power to liberate them from their icy dungeon, which thrill his heart and nerve him to his hardy task. In his avowed aim, the interests of geography were to be subordinate to the claims of humanity. And neither the entreaties of affection, nor the imperiling of a fame, which to a less earnest spirit might have seemed too precious to hazard, could swerve him from the generous purpose.

“And yet this was not a benevolence which could exhaust itself in any mere dazzling, visionary project. It was as practical as it was comprehensive. It could descend to all the minutiae of personal kindness, and gracefully disguise itself even in the most menial offices. When defeated in its great object, and forced to resign the proud hope of a

philanthropist, it turns to lavish itself on his suffering comrades, whom he leads almost to forget the commander in the friend. With unselfish assiduity and cheerful patience he devotes himself as a nurse and counsellor to relieve their wants, and buoy them up under the most appalling misfortunes ; and, in those still darker seasons, when the expedition is threatened with disorganization, conquers them, not less by kindness than by address. Does a party withdraw from him under opposite counsels, they are assured, in the event of their return, of a "brother's welcome." Are tidings brought him that a portion of the little band are forced to halt, he knows not where in the snowy desert, he is off through the midnight cold for their rescue, and finds his reward in the grateful assurance, "They knew that he would come." In sickness he tends them like a brother, and at death drops a tear of manly sensibility on their graves. Even the wretched savages, who might be supposed to have forfeited the claim, share in his kindly attentions ; and it is with a touch of true human feeling that he parts from them at last, as 'children of the same Creator.'

"Then, as the fitting support of this noble quality, there was also an indomitable *energy*. It was the iron column, around whose capital that delicate lily-work was woven. His was not a benevolence which must waste itself in mere sentiment, for want of a power of endurance adequate to support it through hardship and peril. In that slight physical frame, suggestive only of refined culture and intellectual grace, there dwelt a sturdy force of will, which no combination of material terrors seemed to appall, and, by a sort of magnetic impulse, subjected all inferior spirits to its control. It was the calm power of reason and duty asserting their superiority over mere brute courage, and compelling the instinctive homage of Herculean strength and prowess.

"With what firm yet conscientious resolve does he quell the rising symptoms of rebellion which threaten to add the terrors of mutiny to those of famine and disease ! And all through that stern battle with Nature in her most savage haunts, how he ever seems to turn his mild front toward her frowning face, if in piteous appealing, yet not less in fixed resignation !

"But while in that character, benevolence appeared supported by energy and patience, so, too, was it equipped with a most *marvellous tact*. He brought to his beneficent task not merely the resources of acquired skill, but a native power of adapting himself to emergencies, and a fertility in devising expedients, which no occasion ever seemed to baffle. Immured in a dreadful seclusion, where the combined terrors of Nature forced him into all the closer contact with the passions of

man, he not only rose, by his energy, superior to them both, but, by his ready executive talent, converted each to his ministry. Even the wild inmates of that icy world, from the mere stupid wonder with which at first they regarded his imported marvels of civilization, were, at length, forced to descend to a genuine respect and love, as they saw him compete with them in the practice of their own rude, stoical virtues.

“To such more sterling qualities were joined the graces of an affluent *cheerfulness*, that never deserted him in the darkest hours—a delicate and capricious *humor*, glancing among the most rugged realities like the sunshine upon the rocks—and, above all, that invariable stamp of true greatness, a beautiful *modesty*, ever sufficiently content with itself to be above the necessity of pretension. These were like the ornaments of a Grecian building, which, though they may not enter into the effect of the outline, are found to impart to it, the more nearly it is surveyed, all the grace and finish of the most exquisite sculpture.

“And yet strong and fair as were the proportions of that character in its more conspicuous aspects, we should still have been disappointed did we not find albeit hidden deep beneath them, a firm basis of *religious sentiment*. For all serious and thoughtful minds this is the purest charm of those graphic volumes in which he has recorded the story of his wonderful escapes and deliverances. There is every where shining through its pages a chastened spirit, too familiar with human weakness to overlook a Providence in his trials, and too conscious of human insignificance to disdain its recognition. Now, in his lighter, more pensive moods, we see it rising, on the wing of a devout fancy, into that region where piety becomes also poetry :

‘I have trodden the deck and the floes, when the life of earth seemed suspended, its movements, its sounds, its colorings, its companionships; and as I looked on the radiant hemisphere, circling above me, as if rendering worship to the unseen centre of light, I have ejaculated in humility of spirit, ‘Lord, what is man, that thou art mindful of him?’ And then I have thought of the kindly world we had left, with its revolving sunlight and shadow, and the other stars that gladden it in their changes, and the hearts that warmed to us there, till I lost myself in the memories of those who are not; and they bore me back to the stars again.’

“Then, in graver emergencies, it appears as a habitual resource, to which he has come in conscious dependence :

‘A trust, based on experience as well as on promises, buoyed me up

at the worst of times. Call it fatalism, as you ignorantly may, there is that in the story of every eventful life which teaches the inefficiency of human means, and the present control of a Supreme Agency. See how often relief has come at the moment of extremity, in forms strangely unsought, almost at the time unwelcome; see, still more, how the back has been strengthened to its increasing burdens, and the heart cheered by some conscious influence of an unseen Power.'

"And, at length, we find it settling into that assurance which belongs to an experienced faith and hope:—

'I never doubted for an instant, that the same Providence which had guarded us through the long darkness of winter was still watching over us for good, and that it was yet in reserve for us—for some; I dared not hope for all—to bear back the tidings of our rescue to a Christian land.'

"We hear no profane oath vaunted from that little ice-bound islet of human life, where man has been thrown so helplessly into the hands of God; but rather in its stead, murmured amid the wild uproar of the storm, the daily prayer, 'Accept our thanks and restore us to our homes.' Let us believe that a faith which supported him through trials worse than death, did not fail him when death itself came.

"In the near approach of that last moment, he was tranquil and composed. With too little strength either to support or indicate any thing of rapture, he was yet sufficiently conscious of his condition to perform some final acts befitting the solemn emergency. In reference to those who had deeply injured him, he enjoined cordial forgiveness. To each of the watching group around him, his hand is given in the fond pressure of a final parting; and then, as if sensible that his ties to earth are loosening, he seeks consolation from the requested reading of such Scripture sentences as had been the favorite theme of his thoughtful hours.

"Now he hears those soothing beatitudes which fell from the lips of the Man of Sorrows in successive benediction. Then he will have repeated to him that sweet, sacred pastoral—

'The Lord is my Shepherd; I shall not want. He maketh me to lie down in green pastures: he leadeth me beside the still waters. Yea, though I walk through the valley of the shadow of death, I will fear no evil; for Thou art with me: Thy rod and Thy staff, they comfort me.'

"At length are recited the consolatory words with which the Saviour took leave of his weeping disciples:—

'Let not your heart be troubled: ye believe in God, believe also in

me. In my Father's house are many mansions; if it were not so, I would have told you. I go to prepare a place for you.'

"And at last, in the midst of this comforting recital, he is seen to expire—so gently that the reading still proceeds some moments after other watchers have become aware that he is already beyond the reach of any mortal voice. Thus, in charity with all mankind, and with words of the Redeemer in his ear, conveyed by tones the most familiar and beloved on earth, his spirit passed from the world of men."

With these last and sublimest lessons of his life, it is fitting that this sketch should close. Let every American youth, who reads his story, remember that, in an age of materialism when old faiths seem to be decaying, he illustrated, as no man ever did before, the spiritual elements of our nature, and the entire compatibility of deep religious conviction, not only with humane efforts, but with physical researches and with earthly toils, successes, and honors. He will not indeed have lived in vain should history hereafter rank him among the harbingers of that peaceful era when charity shall become heroic, and science be reconciled to religion.

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Engraved by H. A. A. A. A.

IN JOHN COLEMAN A. T. P. N.

John Franklin

CHAPTER I.

THE ARCTIC REGIONS.

The Arctic Regions as here defined, are the northernmost parts of the earth, parallel with the equator, and extending to a distance of twenty-three degrees from the North Pole. They are separated from the North Temperate Regions by the circle of the Arctic Ocean; nearly all of them, Spitzbergen, Nova Zembla, and the northern part of Norway, Sweden, Siberia, Alaska, and British America; and the only unknown regions are the western part of the continent of Asia.

The Arctic Ocean is enclosed between the northern part of Asia and America. Several large rivers empty themselves into it from the interior of these continents. It has an area of over four millions of square miles, and gives to the Pole with an ice barrier, a depth of three thousand fathoms. It is a cold, desolate, and lifeless for centuries. Indeed the ice is never melted.

The Arctic Circle, lying between latitudes sixty-six degrees and thirty degrees, must not be confounded with the Arctic Regions, for the characteristics and phenomena of the higher latitudes, and with some exceptions many degrees

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CHAPTER I.

THE ARCTIC REGIONS.

The Arctic Circle, as laid down on our maps, is a line drawn around the earth, parallel with the equator, and distant in every direction twenty-three degrees and twenty-eight minutes from the North Pole. It separates the North Frigid from the North Temperate Zone. Within this circle lie the Arctic Ocean; nearly all of Greenland; Spitzbergen, Nova Zembla and other islands; northerly portions of Norway, Sweden, Lapland, Russia, Siberia, Alaska, and British America; and the almost unknown regions north-westerly of Greenland.

The Arctic Ocean is enclosed between the northern limits of Europe, Asia, and America. Several large rivers from the three continents flow northerly into it or its tributary waters. It has an area of over four million square miles, and girds the Pole with an ice-locked coast of about three thousand leagues. It is a mysterious sea, and has for centuries baffled the research of navigators.

But the Arctic Circle, lying between latitudes sixty-six and sixty-seven degrees, must not be considered as the boundary of the Arctic Regions, for the characteristic temperatures and phenomena of far higher latitudes extend with some exceptions many degrees

is spent in melting away the ice; and its deficiency in winter is partly supplied by the influence of the progress of congelation. As long as ice remains to thaw or water to freeze, the temperature of the atmosphere can never vary beyond certain limits.

For what is known of the Arctic regions the world is indebted, principally, to the expeditions which, from time to time, have been sent out by different nations—some to search for new routes to China and the Indies, some to look for the North Pole, and some, in later times, for the relief of the lost navigator, Sir John Franklin.

The thrilling experiences and observations of many of these expeditions have been written out by members thereof, and the perusal of their narratives will give the reader a more vivid and far more interesting conception of life and nature in the frigid zone than can be obtained from the study of volumes of didactic description. As it is the plan of this book to give the history of these expeditions, and to do it to some extent in the words of the explorers themselves, full information as to the characteristic features, phenomena, inhabitants, and animal and vegetable life of the Arctic regions will be found in succeeding chapters.





CHAPTER II.

EARLY DISCOVERIES AND HISTORY.

One thousand years ago the mariners of the Scandinavian Peninsula were the boldest of navigators, and the most successful ones of their age. They possessed neither the sextant nor the compass; they had neither charts nor chronometers to guide them; but trusting solely to fortune and their own indomitable courage, they fearlessly launched forth into the vast ocean. Their voyages, distinguished by a strange mixture of commerce, piracy, and discovery, added no little to the geographical knowledge of their day. To quit their bleak regions in search of others still more bleak would have been wholly foreign to their views; yet as the sea was covered with their sails, chance and tempest sometimes drove them in a direction other than southerly.

In the year 861, Naddodr, a Norwegian pirate, was drifted by contrary winds far to the north. For several days no land was visible; then suddenly the snow-clad mountains of Iceland were seen to rise above the mists of the ocean. The viking landed on the island, and gave it the name of Snowland, but discovered no traces of man. Three years afterward, Gardar and Flocke, two Swedes, visited it; and having found a great quantity of drift-ice collected on the

north side of it, they gave it the name of Iceland, which it still bears. In 874, Ingolf and Leif, two famous Norwegian adventurers, carried a colony to this inhospitable region—the latter having enriched it with the booty which he ravaged from England.

About this time Harold, the Fair-haired, had become the despotic master of all Norway. Many of his former equals submitted to his yoke; but others, animated by a love of liberty, emigrated to Iceland. Such were the attractions which the island at that time presented, that not half a century elapsed before all its inhabitable portions were occupied by settlers from Norway, Sweden, Denmark Scotland, and Ireland.

Iceland might as well have been called Fireland, for all of its forty thousand square miles have originally been upheaved from the depths of the waters by volcanic action; and its numerous volcanoes have many times brought ruin upon whole districts. The most frightful visitation occurred in 1783, and its direful effects were long felt throughout the island, over which, for a whole year, hung a dull canopy of cinder-laden clouds.

Pestilence, famine, and severe winters have also from time to time added many a mournful page to Iceland's long annals of sorrow. Once she had over a hundred thousand inhabitants,—now she has scarcely half that number; then she had many rich and powerful families,—now mediocrity or poverty is the universal lot; then she was renowned as the seat of learning and the cradle of literature,—now, were it not for her remarkable physical features, no traveler would ever think of landing on her rugged shores.

In winter, when an almost perpetual night covers

SCENE OF THE GREENLAND COAST.

the wastes of this fire-born land, and the waves of a stormy ocean thunder against its shores, imagination can hardly picture a more desolate scene; but in summer the rugged nature of Iceland invests itself with many a charm. Then the eye reposes with delight on green valleys and crystal lakes, on the purple hills or snow-capped mountains rising in Alpine grandeur above the distant horizon, and the stranger might almost be tempted to exclaim with her patriotic children, "Iceland is the fairest land under the sun."

The colonization of Iceland proved the stepping-stone to further discoveries, although over a century elapsed before any progress was made in a westerly direction; then, 970, an Icelander named Gunnbjorn, first saw the high mountain coast of Greenland.

Soon afterwards, a Norwegian named Thorwald, with his son, the famous Eric the Red, flying their country on account of homicide, took refuge in Iceland. Here Thorwald died, and Eric, his hands again imbued with blood, was obliged, in 982, to once more take refuge on the high seas. He sailed westward in quest of the land discovered by Gunnbjorn, and ere long reached its shores. Having entered a spacious creek, he spent the winter on a pleasant adjacent island. In the following season, pursuing his discoveries, he explored the continent, and was delighted with the freshness and verdure of its coast.

Eric afterwards returned to Iceland, and by his inviting description of the new country, which he named Greenland, induced great numbers to sail with him and settle there. They started in 985, with twenty-five vessels, but on account of foul weather only fourteen of them reached the destined harbor. Other emigrants soon followed, and in a few years all of

Southern Greenland was occupied by flourishing colonies.

An adventurous young Icelfander named Biarni, who was in Norway when Eric's colonists sailed for Greenland, on returning home and finding that his father had gone with them, vowed that he would spend the winter with his father, as he had always done, and set forth to find the little settlement on the unknown shores of Greenland.

A northerly gale sprung up and for many days he was driven to the southward of his course. At last he fell in with a coast in the west, wooded and somewhat hilly. No landing was made, and the anxious mariners, sailing for two days to the northward, found another land, low and level, and overgrown with woods. Not recognizing the mountains nor meeting with icebergs, Biarni sailed northerly, and in three days came upon a great island with high mountains, much ice, and desolate shores. He was then driven before a violent south-west wind for four days, when by singular good fortune he reached the Greenland settlement which he was seeking.

From the internal evidence afforded by the dates and the causes, as well as from the corroboration of subsequent expeditions, it would appear that these mariners brought up on the coast of New England. The first land seen, judging from the descriptions, was probably Nantucket or Cape Cod. Two days' sailing would easily bring them to the level and forest-covered shores of Nova Scotia, and three more to the bleak and precipitous coast of Newfoundland. From that island to the southern extremity of Greenland, the distance is but six hundred miles, which a vessel, running before a favorable gale, might readily accomplish within the given time.

In the year 999, Leif, a son of Eric, having visited the coast of Norway, was induced, by the zealous and earnest solicitation of King Olaf Tryggvason, to embrace the Christian faith; and, carrying with him some monks, he found, through their ministry, no great difficulty in persuading his father and the rest of the settlers to forsake the rites of Paganism. Having heard Biarni much blamed at Norway for neglecting to prosecute his discoveries, Leif was stimulated to undertake a voyage in quest of new lands. He bought the vessel of Biarni, and with thirty-five men, some of whom had been on the former voyage, set sail in the year 1000.

Probably the first lands sighted by him were the same as those which Biarni had already discovered, but they were now taken in an inverse order. Having steered to the westward of an island (probably Nantucket) the voyagers "passed up a river and thence into a lake." This channel, it would seem, was the Seaconnet River, the eastern outlet of Narragansett Bay, which leads to the beautiful lake-like expanse now known as Mount Hope Bay. From the great number of wild grapes found here the whole country received the name of Vinland.

Numerous other voyages, according to Icelandic manuscripts, were made from Greenland and Iceland to the shores of Vinland. To-day inscriptions are found which were perhaps the handiwork of these adventurers; but the discoveries they made appear to have been forgotten like the Greenland colonists, and it has not been uncommon for modern students to doubt the whole story of the discovery of America by the Northmen. Many however believe in it, and some propose to celebrate our centennial anniversary

by erecting in Madison, Wis., a monument to the Viking who first discovered America.

In 1477 Columbus visited Iceland, and voyaged a hundred leagues beyond it, probably to the westward, and, it may be, came near reviving the ancient discoveries of the Northmen, and tracking the steps of Biarni, Leif, and Thorfinn to the long lost Vinland.

The original settlement of Greenland began about the southern promontory, near Cape Farewell, and stretched along the coast in a north-westerly direction. Farther north, and probably extending as high as the latitude of sixty-six degrees, was a second settlement. The former is said to have included, at its most flourishing period, twelve parishes and two convents; the latter contained four parishes. Between the two districts lay an uninhabitable region of seventy miles. The whole population was about six thousand. For some centuries a commercial intercourse was maintained with Norway; but the trade was subsequently seized as an exclusive privilege of the Danish court.

The colonists of Greenland led a life of hardship and severe privations. They dwelt in hovels surrounded by mountains of perpetual ice; they never tasted bread, but subsisted on the fish which they caught, joined to a little milk obtained from their starving cows; and, with seal-skins and the tusks of the walrus, they purchased from the traders who occasionally visited them, the wood required for fuel and the construction of their huts.

About the year 1376, the natives of the country, or Esquimaux, whom the Norwegian settlers had in contempt called *Dwarfs*, attacked the colonies. The scanty population was enfeebled by repeated alarms; and that dreadful pestilence, termed the *Black Death*,

which raged over Europe from the year 1402 to 1404, at last extended its ravages to Greenland, and nearly completed the destruction.

In 1418 a hostile fleet, suspected to be English, laid waste the country. Political troubles and wars in Scandinavia at a later date, caused Greenland to be neglected, and finally forgotten; and it is believed that its last colonists either retreated to Iceland or were destroyed by the Esquimaux about the commencement of the sixteenth century.

In 1581 and 1605, expeditions were sent out from Denmark to see if any inhabitants of Norse origin still dwelt in Greenland; but none could be found, although traces of the ancient settlement were seen on the western coast.

An idea formerly prevailed that a colony had also been planted on the east side of Greenland, which had been cut off from the rest of the world by vast barriers of ice accumulating on the shore. The problem was, whether the ill-fated people had survived the catastrophe, or been entombed in snow and ice, as the unhappy citizens of Pompeii were involved in a shower of volcanic ashes. Ships were sent out at different times by Denmark for their relief, but it is now evident that no such settlement ever existed. The coast of Eastern Greenland is everywhere bold and rocky, and the interior of the country consists of clusters of mountains covered with eternal snows.

In 1721, Hans Egede, a Norwegian pastor, who had long felt the deepest concern for the descendants of the old Christian communities of Greenland, in whose total destruction he could not believe, sailed from Bergen with his wife, four children, and forty colonists, having resolved to become the apostle of regenera-

ted Greenland. They landed July 3d, and soon erected a wooden chapel at the location of the present settlement of Godthad.

Although Egede met with severe trials, and was deserted by nearly all the settlers, he persevered in sustaining his foothold in the country; and in 1733 the king of Denmark bestowed on the mission an annual grant of two thousand dollars, and sent three Moravian brothers to assist him.

Egede returned to Norway in 1735; during his long stay in Greenland he could find nothing in the physiognomy or language of the Esquimaux which pointed to an European origin.

Dr. Kane visited this locality in 1853, and speaks of it as follows:—

“While we were beating out of the fiord of Fisker-naes, I had an opportunity of visiting Lichtenfels, the ancient seat of the Greenland congregations, and one of the three Moravian settlements. I had read much of the history of its founders; and it was with feelings almost of devotion, that I drew near the scene their labors had consecrated.

“As we rowed into the shadow of its rock-embayed cove, every thing was so desolate and still, that we might have fancied ourselves outside the world of life; even the dogs—those querulous, never-sleeping sentinels of the rest of the coast—gave no signal of our approach. Presently, a sudden turn around a projecting cliff brought into view a quaint old Silesian mansion, bristling with irregularly-disposed chimneys, its black overhanging roof studded with dormer windows and crowned with an antique belfry.

“We were met, as we landed, by a couple of grave ancient men in sable jackets and close velvet skull-

VISKERNÆS—HOME OF HANS CHRISTIAN.

MORAVIAN SETTLEMENT AT LICHTENFELS.

caps, such as Vandyke or Rembrandt himself might have painted, who gave us a quiet but kindly welcome. All inside of the mansion-house—the furniture, the matron, even the children—had the same time-sobered look. The sanded floor was dried by one of those huge white-tiled stoves, which have been known for generations in the north of Europe; and the stiff-backed chairs were evidently coeval with the first days of the settlement. The heavy-built table in the middle of the room was soon covered with its simple offerings of hospitality; and we sat around to talk of the lands we had come from and the changing wonders of the times.

“We learned that the house dated back as far as the days of Matthew Stach; built, no doubt, with the beams that floated so providentially to the shore some twenty-five years after the first landing of Egede; and that it had been the home of the brethren who now greeted us, one for twenty-nine and the other twenty-seven years. The “Congregation Hall” was within the building, cheerless now with its empty benches; a couple of French horns, all that I could associate with the gladsome piety of the Moravians, hung on each side the altar. Two dwelling-rooms, three chambers, and a kitchen, all under the same roof, made up the one structure of Lichtenfels.

“Its kind-hearted inmates were not without intelligence and education. In spite of the formal cut of their dress, and something of the stiffness that belongs to a protracted solitary life, it was impossible not to recognise, in their demeanor and course of thought, the liberal spirit that has always characterized their church. Two of their “children,” they said, had “gone to God” last year with the scurvy; yet they hesitated at receiving a scanty supply of potatoes as a present from our store.”

The Danish colonies now in Greenland are scattered along some eight hundred miles of the western coast, and are more flourishing than the ancient settlements. The European population is only about one hundred and fifty—all in the service of the Danish company excepting the missionaries—while the native Esquimaux of the district, among whom they live on good terms, are estimated at about nine thousand.

Farther north, and cut off from civilization and their more favored brothers of the Danish neighborhoods by impassable glaciers, are other Esquimaux—nomads, who range over a narrow belt extending along the coast for six hundred miles. They were the neighbors of Dr. Kane during his two winters' imprisonment in Rensselaer Harbor. In his "Arctic Explorations," Dr. Kane pays an affecting tribute to their virtues and draws gloomy auguries of their future:—

"It is with a feeling of melancholy that I recall these familiar names. They illustrate the trials and modes of life of a simple-minded people, for whom it seems to be decreed that the year must very soon cease to renew its changes. It pains me when I think of their approaching destiny,—in the region of night and winter, where the earth yields no fruit and the waters are locked,—without the resorts of skill or even the rude materials of art, and walled in from the world by barriers of ice without an outlet.

"If you point to the east, inland, where the herds of reindeer run over the barren hills unmolested,—for they have no means of capturing them,—they will cry "Sermik," "glacier;" and, question them as you may about the range of their nation to the north and south, the answer is still the same, with a shake of the head, "Sermik, sermik-soak," "the great ice-wall;" there is no more beyond.

"They have no "kresuk," no wood. The drift-timber which blesses their more southern brethren never reaches them. The bow and arrow are therefore unknown; and the kayak, the national implement of the Greenlander, which, like the palm-tree to the natives of the tropics, ministers to almost every want, exists among them only as a legendary word."

Though a long intercourse with Europeans has somewhat modified the character of the Southern Greenlanders, and acquainted them with some of the luxuries of civilization, they still retain to a great degree their former customs and modes of life. This is probably owing to the sparse population, and their vagrant life. Depending wholly upon the products of the chase for their food, they are most accomplished hunters; and the sea is the principal source of their sustenance.

England narrowly missed sharing in the honor awarded to Columbus for his great achievement. After vainly soliciting Spain and Portugal for aid, that navigator sent his brother to Henry VII., with propositions which were at once accepted; but before the return of his messenger, Columbus, under the auspices of Isabella, had started on his voyage. The news of his success excited much interest in England; and the king granted to John Cabot and his three sons, a patent "to sail to all parts, countries, and seas," at their own expense, as explorers. Cabot was an Italian, once a "Merchant of Venice," then living in Bristol, England, where his son Sebastian was born about 1477. A subsequent residence in Venice had given the son a taste for maritime enterprises, which was increased by his learning the trade of making maps.

The explorers, in a ship named the "Matthew," fitted out probably at the expense of the Cabots, sailed from Bristol in May, 1497. Sebastian, though only nineteen years of age, was entrusted with the command, but was accompanied by his father.

On the 24th of June, they beheld portions of the coast of Labrador and Newfoundland stretched out before them. This discovery of a continent (fourteen months before Columbus discovered the main land) caused the explorers little exultation, although the British claim to the thirteen colonies was primarily based thereon. The object of the voyage was to discover a passage to India; and to be obstructed by land displeased the mariners. Entering one of the channels leading into Hudson's Bay, they continued on for several days, when the crew became despondent and insisted on returning. Cabot yielded to their clamors and sailed for England.

In the Spring of 1498, Sebastian, with three hundred men, again set sail for the region he had discovered. These unfortunate people he landed on the bleak and inhospitable coast of Labrador, that they might form a settlement there, and then with the squadron renewed his search for the North-west passage. On his return to the station, he found that the settlers had suffered intensely from cold and exposure. A number had already perished, and the balance were carried back to England.

Cabot made a third voyage to the North-west in 1517, and it is believed that he discovered the two straits which now bear the names of Davis and Hudson.

In the year 1500, Gasper Cortereal, of Portugal, sailed in search of a North-west passage. He reached

Labrador, and sailed a long distance along its coast, and then with a number of natives on board returned home. The next year he guided two ships to the northern point of his former voyage, where he entered a strait; here the vessels were separated by a tempest. One of them succeeded in extricating itself, and searched for some time in vain for its lost consort; but that which had on board the gallant leader of the expedition returned no more, and no trace could ever be obtained of its fate.

The next year, Miguel Cortereal sailed with three ships in search of his brother. Two of the vessels returned in safety, but Miguel and his crew were never heard from. A third brother wished to search for his lost kindred, but the king would not allow him to do so.

French expeditions, under Verazzani (1523) and Cartier (1524) were equally unsuccessful in their search for the north-west passage.

CHAPTER III.

ENGLISH EXPEDITIONS TO THE NORTH-EAST.

(WILLOUGHBY—CHANCELOR—BURROUGHS—ETC.)

IN 1553, after a long slumber, the spirit of discovery in England was again aroused, and a voyage was planned with a view to reach by way of the north and north-east, the celebrated regions of India and Cathay.

Sebastian Cabot was prominent in forwarding this enterprise, and though too old to lead the expedition he drew up the instructions under which it sailed. In it the mariners were warned not to be too much alarmed when they saw the natives dressed in lions' and bears' skins, with long bows and arrows, as this formidable appearance was often assumed merely to inspire terror. He told them, that there were persons armed with bows, who swam naked, in various seas, havens, and rivers, "desirous of the bodies of men, which they covet for meat," and against whom diligent watch must be kept night and day. He exhorted them to use the utmost circumspection in their dealings with these strangers, and if invited to dine with any lord or ruler, to go well armed, and in a posture of defence.

The command of the expedition was given to Sir

Hugh Willoughby, and three vessels having been fitted out with great care, sailed from England in the month of May. The court and a great multitude of people witnessed their departure, and the occasion was one of great interest and excitement. Willoughby was furnished by King Edward, with a letter of introduction, addressed to all "kings, princes, rulers, judges, and governors of the earth," in which free passage and other favors were asked for the explorers; and if granted, he concluded,—“We promise, by the God of all things that are contained in heaven, earth, and the sea, and by the life and tranquillity of our kingdoms, that we will with like humanity accept your servants, if at any time they shall come to our kingdoms.”

On the 14th of July the explorers were near the coast of Norway, and on approaching the North Cape saw before them the Arctic Ocean stretching onward to the Pole. Here Sir Hugh exhorted his commanders, Chancellor and Durfooth to keep close together. Soon after this there arose such “terrible whirlwinds,” that they were obliged to stand out to the open sea, and allow the vessels to drift at the mercy of the waves.

Amid the thick mists of the next stormy night the vessels of Willoughby and Chancellor separated, and never again met. Willoughby's pinnace was dashed to pieces amid the tempest; and next morning, when light dawned, he could see neither of his companions; but, discovering at length the smaller vessel called the Confidence, he continued his voyage.

He now sailed nearly two hundred miles north-east and by north, but was astonished and bewildered at not discovering any symptom of land; whence it appeared that “the land lay not as the globe made mention.” Instead of sailing along or towards Norway, he

was plunging deeper and deeper into the unknown abyss of the Northern Ocean.

At length land appeared, but high, desolate, and covered with snow, while no sound was wafted over the waves, except the crash of its falling ice and the hungry roar of its monsters. This coast was evidently that of Nova Zembla; but there was no point at which a landing could be made. After another attempt to push to the northward, they turned to the south-west, and in a few days saw the coast of Russian Lapland. Here they must have been very near the opening into the White Sea, into which, had fortune guided their sails, they would have reached Archangel, have had a joyful meeting with their comrades, and spent the winter in comfort and security. An evil destiny led them westward.

The coast was naked, uninhabited, and destitute of shelter, except at one point, where they found a shore bold and rocky, but with one or two good harbors. Here, though it was only the middle of September, they felt already all the premature rigors of a northern season; intense frost, snow, and ice driving through the air, as though it had been the depth of winter. The officers conceived it therefore most expedient to search no longer along these desolate shores, but to take up their quarters in this haven till the ensuing spring.

The narrative here closes, and the darkest gloom involves the fate of this first English expedition. Neither the commander nor any of his brave companions ever returned to their native shores. After long suspense and anxiety, tidings reached England that some Russian sailors, as they wandered along these dreary boundaries, had been astonished by the view

of two large ships, which they entered, and found the gallant crews all lifeless. There was only the journal of the voyage, with a note written in January, showing that at that date the crews were still alive. What was the immediate cause of a catastrophe so dismal and so complete, whether the extremity of cold, famine, or disease, or whether all these ills united at once assailed them, can now only be matter of sad conjecture. Thomson thus pathetically laments their fate:—

“ Miserable they,
Who, here entangled in the gathering ice,
Take their last look of the descending sun,
While, full of death, and fierce with tenfold frost,
The long, long night, incumbent, o’er their heads,
Falls horrible. Such was the Briton’s fate,
As with *first* prow (what have not Britons dared !)
He for the passage sought, attempted since
So much in vain.—”

After parting with the other two ships Chancelor reached the port of Wardhuys and after waiting seven days for his companions, pushed fearlessly on toward the north-east, and sailed so far that he came at last “to a place where they found no night at all.” Then they reached the entrance of an immense bay (the White Sea) and espied a fishing boat, the crew of which, having never seen a vessel of similar magnitude, were as much astonished as the native Americans had been at the Spaniards, and, taking the alarm, fled at full speed. Chancelor, with his party, pursued and overtook them; whereupon they fell flat on the ground half-dead, crying for mercy. He immediately raised them most courteously, and by looks, gestures, and gifts, expressed the most kind intentions. Being then allowed to depart, they spread everywhere the report of the arrival “of a strange nation, of singular gentleness and courtesy.” The natives came in crowds, and

the sailors were copiously supplied with provisions and everything they wanted.

Chancellor now learned that he was at the extremity of a vast country obscurely known as Russia or Muscovy, ruled by a sovereign named Ivan Vasilovitch, and obtained permission to visit him at his court at Moscow. The journey was made on sledges, and Chancellor returned with a letter from the Czar, granting privileges to traders, which led to the formation of the Muscovy Company.

Chancellor went to Russia a second time, in the employ of this company; and on the homeward voyage with four ships and an ambassador from the Czar, two of the vessels were wrecked on the coast of Norway; a third reached the Thames; but the fourth, in which were the chiefs of the expedition, was driven ashore on the coast of Scotland, where it went entirely to pieces. Chancellor endeavored, in a very dark night, to convey himself and the ambassador ashore in a boat. The skiff was overwhelmed by the tempest, and Chancellor was drowned, though the ambassador succeeded in reaching the land. He thence proceeded to London, where Philip and Mary gave him a splendid and pompous reception.

In 1556, a vessel called the Searchthrift, was fitted out and placed under the command of Stephen Burroughs, who had gone with Chancellor on his first voyage. Enthusiasm and hope seem to have risen as high as at the departure of the first expedition. Sebastian Cabot came down to Gravesend with a large party of ladies and gentlemen, and, having first gone on board, and partaken of such cheer as the vessel afforded, invited Burroughs and his company to a splendid banquet at the sign of the Christopher.

WINTER IN MOSCOW.

Among the islands of Waygatz, the voyagers fell in with a Russian craft, and on giving the master thereof a present of pewter spoons, he stated that the adjoining country was that of the wild Samoides, who were said to eat Russians when opportunity offered. At a deserted encampment of these people, Burroughs saw three hundred of their idols—human figures of horrible aspect.

After this, Burroughs approached Nova Zembla, but as winter was near he concluded that it would be useless to attempt further explorations that season, and so turned homeward.

The Muscovy Company now attempted to open communication with Persia and India across the Caspian, and by ascending the Oxus to Bochara. This scheme they prosecuted at great cost, and by a series of bold adventures, in which Jenkinson, Johnson, Alcocke, and other of their agents, penetrated deep into the interior regions of Asia. An unusual degree of courage was indeed necessary to undertake this expedition, which was to be begun by passing round the North Cape to the White Sea, then by a land journey and voyage down the Volga, across the whole breadth of the Russian empire to Astrakhan, before they could even embark on the Caspian. It was soon ascertained, that no goods could bear the cost of such an immense and dangerous conveyance by sea and land.

This channel of intercourse with the Indies having failed, attention was again attracted to the route by the north and east of Asia. John Balak, who had been living at Duisburg, sent on much information of the country and of the attempts of a traveler named Assenius to penetrate to the eastward. He described a river, probably the Yenisei, down which came

"great vessels laden with rich and precious merchandise, brought by black or swart people." In ascending this river, men came to the great lake of Baikal, on whose banks were the Kara Kalmucs, who, he asserted, were the very people of Cathay. It was added, that on the shores of this lake had been heard sweet harmony of bells, and that stately and large buildings had been seen therein.

Reasoning from this new information Gerard Mercator, the famous geographer and map-maker of those days, claimed that a short passage beyond the limit already reached by navigators would carry them to Japan and China. This was underrating the breadth of Asia by a hundred degrees of longitude, or more than a fourth of the circumference of the globe.

To realize these views, two vessels under Arthur Pet and Charles Jackson left England in 1580. On reaching high latitudes they were surrounded with fields of ice. They were also enveloped in fogs; and obliged to fasten to icebergs, where, "abiding the Lord's leisure, they continued with patience." Finally they found their way home without making any progress at solving the problem.

LACE RADICAL CATIONIC DIMER

CHAPTER IV.

DUTCH EXPEDITIONS TO THE NORTH-EAST.

(WM. BARENTZ—CORNELIZ RYP.)

THE English attempts to find a North-east passage to the Indies having all signally failed, the Dutch took up the enterprise, and a society of merchants fitted out three vessels, which sailed from the Texel on the 5th of June, 1594, under the general guidance of William Barentz, a noted pilot, and an expert sailor.

On approaching Nova Zembla two of the ships attempted to pass by the old route of the Strait of Waygatz; but Barentz himself, taking a bolder course, endeavored to pass round to the northward of Nova Zembla, which opposed his eastward progress. Passing the Black Cape and William's Isle, they saw various features characteristic of the Arctic world. At the Orange Isles, they came upon three hundred walrus, lying in heaps upon the sand and basking in the sun. Supposing that these animals were helpless on shore, the sailors marched against them with pikes and hatchets, but, to their surprise, were obliged to retire in dishonor.

The crews had a fierce encounter with a Polar bear. Having seen one on the shore, they entered their shallop, and discharged several balls at him, but with-

out inflicting any deadly wound. They were then happy when they succeeded in throwing a noose about his neck, hoping to lead him like a lapdog, and carry him as a trophy into Holland. They were not a little alarmed by his mighty and tremendous struggles; but what was their consternation, when he fastened his paws on the stern and entered the boat! The whole crew expected instant death, either from the sea or from his jaws. Providentially at this moment the noose got entangled with the iron work of the rudder, and the creature struggled in vain to extricate himself. Seeing him thus fixed, they mustered courage to advance and despatch him with their spears.

Barentz, reached the northern extremity of Nova Zembla by August 1st; but the wind blew so strong, that he and his crew gave up hope of passing that point, and resolved to return.

The two other vessels meantime pushed on along the coast. On turning a point the Dutch observed one of those great collections of rudely carved images which had been formerly remarked by Burroughs. These consisted of men, women, and children, sometimes having from four to eight heads, all with their faces turned eastward, and many horns of reindeer lying at their feet; it was called, therefore, the Cape of Idols.

After passing through the strait of Waygatz, and sailing for some space along the coast of Nova Zembla, they were repelled by the icy barriers; but having by perseverance rounded these, they arrived at a wide, blue, open sea, with the coast bending rapidly southward; and though this was only the shore of the Gulf of Obi, they doubted not that it was the eastern boundary of Asia, and would afford an easy passage

down upon China. Instead, however, of prosecuting this voyage, they determined to hasten back and communicate to their countrymen this joyful intelligence. The two divisions met on the coast of Russian Lapland, and arrived in the Texel on the 16th of September.

The intelligence conveyed in regard to the latter part of this expedition kindled the most sanguine hopes in the government and people of Holland. Six vessels were fitted out, not as for adventure and discovery, but as for assured success, and for carrying on an extensive traffic in the golden regions of the East. They were laden with merchandise, and well supplied with money; while a seventh, a light yacht, was instructed to follow them till they had passed Tabis, the supposed bounding promontory of Asia; when, having finally extricated themselves from the Polar ices and directed their course to China, it was to return to Holland with the joyful tidings.

The squadron sailed from the Texel, the 2d of June 1595. Nothing great occurred till the 4th of August when they reached the strait between Waygatz and the continent, to which they had given the appellation of the Strait of Nassau. They came to the Cape of Idols; but though these were still drawn up in full array, no trace was found of the habitations which they might have seemed to indicate. A Russian vessel, however, constructed of pieces of bark sewed together, was met on its way from the Pechora to the Obi in search of the teeth of the sea-horse, whale-oil, and geese. The sailors accosted the Dutch in a very friendly manner, presented eight fat birds, and on going on board one of the vessels, were struck with astonishment at its magnitude, its equipments, and the high order with which everything was arranged. This

being a fast-day, they refused meat, butter, and cheese ; but, on being offered a raw herring, eagerly swallowed it entire, head and tail inclusive.

The navigators, after considerable search, fell in with a party of Samoiedes, who manifested much jealousy of the strangers, and on the approach of the interpreter, drew their arrows to shoot him ; but he called out, " We are friends " ; upon which they laid down their weapons, and saluted him in the Russian style, by bending their heads to the ground.

On hearing a gun fired, they ran away and leaped like madmen, till assured that no harm was intended. A sailor boldly went up to the chief, dignified in the narrative with the title of king, and presented him with some biscuit, which the monarch graciously accepted and ate, though looking round somewhat suspiciously. At length the parties took a friendly leave ; but a native ran after the foreigners with signs of great anger, on account of one of their rude statues which a sailor had carried off.

Being informed that a few days' sail would bring them to a point beyond which there was a large open sea, they made repeated attempts to reach it, but were driven back by floating ice, and at the end of September were forced to return to Holland without having accomplished any one of the brilliant exploits for which they had set out.

Another expedition of two vessels, entrusted to Barentz and Corneliz Ryp, sailed from Amsterdam on the 10th of May, 1596. As homesickness was suspected to have some relation to the failure of former expeditions, none but unmarried persons were admitted as members.

Avoiding the coast of Russia they pushed north-

erly, and on the 22d saw the Shetland Islands. On the 9th of June they discovered a long island rising abruptly into steep and lofty cliffs, and named it Bear Island. The horror of this isle to their view must have been unspeakable: the prospect dreary; black where not hid with snow, and broken into a thousand precipices. No sounds but of the dashing of the waves, the crashing collision of floating ice, the discordant notes of myriads of sea-fowl, the yelping of Arctic foxes, the snorting of the walruses, or the roaring of the Polar bears.

Proceeding onward, they reached the latitude of 80° , and discovered the coast of the Spitzbergen Archipelago, a cluster of islands lying nearer the North Pole than any other known land, excepting the regions discovered by Kane, Hayes, and Hall. Notwithstanding its high latitude, Spitzbergen has been much frequented by whaling-ships, walrus hunters and amateur sportsmen.

The mariners, finding their progress eastward stopped by this line of coast, now retraced their route along its deep bays, still steering southward till they found themselves again at Bear Island. Here Corneliz and Barentz separated; the former proposing to push again northward.

Barentz proceeded south-easterly intending to round the northern point of Nova Zembla. On the 6th of August, he fastened his vessel to a large iceberg amid drifting ice, off Cape Nassau.

On the 10th, the ice began to separate, and the seamen remarked that the berg to which they were moored was fixed to the bottom, and that all the others struck against it. Afraid that these loose pieces would collect and enclose them, they sailed on,

mooring themselves to successive fragments, one of which rose like a steeple, being twenty fathoms above and twelve beneath the water. They saw around them more than four hundred large icebergs, the fear of which made them keep close to the shore, not being aware that in that quarter they were formed.

Steering on they came to Orange Island, which forms the northern extremity of Nova Zembla. Here ten men swam on shore, and, having mounted several piles of ice which rose, as it were, into a little mountain, they had the satisfaction of seeing the coast tending southward, and a wide open sea to the south-east. They hastened back to Barentz with these joyful tidings, and the success of the voyage was considered almost secure.

But these hopes were delusive. After doubling Cape Desire they were drawn into what they called Icy Port, and the vessel was thrown into a position almost perpendicular. From this critical attitude they were relieved next day; but fresh masses of ice continually increased the terrible ramparts around them.

The explorers now felt that they must bid adieu for this year to all hopes of escape from their icy prison. As the vessel was cracking continually, and opening in different quarters, they made no doubt of its going to pieces, and could hope to survive the winter only by constructing a hut, which might shelter them from the approaching rigor of the season. Parties sent into the country reported having seen footsteps of reindeer, also a river of fresh water, and, what was more important still, a great quantity of fine trees, with the roots still attached to them, strewed upon the shore, all brought down the rivers of Russia and Tartary.

These circumstances cheered the mariners; they trusted that Providence, which had in this surprising manner furnished materials to build a house, and fuel to warm it, would supply also whatever was necessary for their passing through the approaching winter, and for returning at length to their native country. A sledge was instantly constructed; three men cut the wood, while ten drew it to the spot marked out for the hut. They sought to raise a rampart of earth for shelter and security, and employed a long line of fire in the hope of softening the ground, but in vain. The carpenter having died, it was found impossible to dig a grave for him, and they lodged his body in a cleft of the rock.

The building of the hut was carried on with ardor, yet the cold endured in this operation was intense, and almost insupportable. The snow sometimes fell so thick, for days successively, that the seamen could not stir from under cover. They had at the same time hard and perpetual combats with the Polar bear. One day three of these furious animals chased the working party into the vessel and advanced furiously to attack them, but finally retreated.

Sometime after this a westerly wind cleared away the ice and they saw a wide open sea without, while the vessel was enclosed within, as it were, by a solid wall. By October they completed their hut, and prepared to convey thither their provisions and stores. Some painful discoveries were now made. Several tuns of fine Dantzic beer, of medicinal quality, from which they had anticipated much comfort, had frozen so hard as to burst the casks; the contents remained in the form of ice, but when thawed it tasted like bad water.

The sun began now to pay only short visits, and to give signs of approaching departure. He rose in the south-south-east and set in the south-south-west, while the moon was scarcely dimmed by his presence. On the 4th of November the sky was calm and clear, but no sun rose or set.

The dreary winter night of three months, which had now set in, was not, however, without some alleviations. The moon, now at the full, wheeled her pale but perpetual circle round the horizon. With the sun disappeared also the bear, and in his room came the Arctic fox, a beautiful little creature, whose flesh resembled kid, and furnished a variety to their meals. They found great difficulty in the measurement of time, and on the 6th rose late in the day, when a controversy ensued whether it was day or night. The cold had stopped the movements of all the clocks, but they afterward formed a sand-glass of twelve hours, by which they contrived tolerably to estimate their time.

On the 3d of December, as the sailors lay in bed, they heard from without a noise as tremendous as if all the mountains of ice by which they were surrounded had fallen in pieces over each other, and the first light which they afterward obtained showed a considerable extent of open sea.

As the season advanced, the cold became always more and more intense. Early in December a dense fall of snow stopped up the smoke flues so that nothing but a low fire could be kept up. The room was thus kept at a low temperature, which was partially remedied by warming the beds with heated stones. Ice two inches thick formed on the walls; and their suffering came to such an extremity, that, casting at each other

languishing and piteous looks, they anticipated the extinction of the life of the whole crew.

They now resolved that, cost what it might, they should for once be thoroughly warmed. They repaired, therefore, to the ship, whence they brought an ample supply of coal; and having kindled an immense fire, and carefully stopped up the windows and every aperture by which the cold could penetrate, they did bring themselves into a most comfortable temperature. In this delicious state, to which they had been so long strangers, they went to rest, and talked gayly for some time before falling asleep. Suddenly, in the middle of the night, several awakened in a state of the most painful vertigo; their cries roused the rest and all found themselves, more or less, in the same alarming predicament. On attempting to rise, they became dizzy, and could neither stand nor walk. At length two or three contrived to stagger towards the door; but the first who opened it fell down insensible among the snow, but the wintry air, which had been their greatest dread, now restored life to the whole party.

In the midst of these sufferings, remembering that the 5th of January was the feast of the Kings, they besought the master that they might be allowed to celebrate that great Dutch festival. They had saved a little wine and two pounds of flour, with which they fried pancakes in oil; the tickets were drawn, the gunner was crowned king of Nova Zembla, and the evening passed as merrily as if they had been at home round their native fireside.

About the middle of January the crews began to experience some abatement of that deep darkness in which they had so long been involved, and affairs assumed a more cheerful aspect. Instead of constant-

ly moping in the hut, the men went out daily, employed themselves in walking, running, and athletic games, which warmed their bodies and preserved their health. With the sun, however, appeared their old enemy, the bear. One attacked them amid so thick a mist that they could not see to point their pieces, and sought shelter in the hut. The bear came to the door, and made the most desperate attempts to burst it open; but the master kept his back firmly set against it, and the animal at last retreated. Soon after he mounted the roof, where, having in vain attempted to enter by the chimney, he made furious attempts to pull it down, having torn the sail in which it was wrapped; all the while his frightful and hungry roarings spread dismay through the mansion beneath; at length he retreated. Another came so close to the man on guard, who was looking another way, that, on receiving the alarm from those within and looking about, he saw himself almost in the jaws of the bear; however, he had the presence of mind instantly to fire, when the animal was struck in the head, retreated, and was afterward pursued and despatched.

In February, a heavy north-east gale brought a cold more intense than ever, and buried the hut again under snow. This was the more deeply felt, as the men's strength and supply of generous food to recruit it were alike on the decline. They no longer attempted daily to clear a road, but those who were able went out and in by the chimney. A dreadful calamity then overtook them in the failure of their stock of wood for fuel. They began to gather all the fragments which had been thrown away, or lay scattered about the hut; but these being soon exhausted,

it behooved them to carry out their sledge in search of more. To dig the trees, however, out of the deep snow, and drag them to the hut, was a task which, in their present exhausted state, would have appeared impossible, had they not felt that they must do it or perish.

In the course of March and April, the weather became milder, yet the barriers which enclosed the ship continued, and, to their inexpressible grief, rapidly increased. In the middle of March these ramparts were only 75 paces broad, in the beginning of May they were 500. These piles of ice resembled the houses of a great city, interspersed with apparent towers, steeples, and chimneys. The sailors, viewing with despair this position of the vessel, earnestly entreated permission to fit out the two boats, and in them to undertake the voyage homeward. The mere digging of the boats from under the snow was a most laborious task, and the equipment of them would have been next to impossible, but for the enthusiasm with which it was undertaken.

By the 11th of June they had the boats fitted out, their clothes packed, and the provisions embarked. Then, however, they had to cut a way through the steeps and walls of ice which intervened between them and the open sea. Amid the extreme fatigue of digging, breaking, and cutting, they were kept in play by a huge bear which had come over the frozen sea from Tartary.

At length the crew, having embarked all their clothes and provisions, set sail on the 14th with a westerly breeze. In the three following days they passed the Cape of Isles, Cape Desire, and came to Orange Isle, always working their way through much

encumbering ice. As they were off Icy Cape, Barentz, who had been long struggling with severe illness, desired to be lifted up that he might take a last view of that fatal and terrible boundary, and he gazed upon it for a considerable time.

On the following day the boats were again involved amid masses of drift-ice; but one of the men boldly took a rope to a solid floe, and by this means all the crew, then the stores, and finally the boat itself, reached a secure position. During this detention Barentz died, to the great grief of all his crew.

On the 22d there appeared open sea at a little distance, and having dragged the boats over successive pieces of ice, they were again afloat. In the three following days they reached Cape Nassau, the ice frequently stopping them, but opening again like the gates of a sluice, and allowing a passage. On the 26th they were obliged once more to disembark and pitch their tents on the frozen surface.

On the 7th of July they again dragged the boats to an open sea, and from this date their progress though often obstructed was never stopped. On the 28th they approached the southern part of Nova Zembla where they found two Russian vessels at anchor, and were received by their crews with much courtesy.

After mutual presents, the parties set out to sail together to Waygatz, but were separated by a gale. On the 4th of August the Dutch came in view of the coast of Russia, and after a tedious voyage along the shore reached Kola, where they found Corneliz, who conveyed them to Amsterdam. Corneliz had not been successful in making any discovery of importance.

VOTIVE CROSS AND MIDNIGHT SUN--NORTHERN RUSSIA.

CHAPTER V.

ARCTIC VOYAGES OF MARTIN FROBISHER AND JOHN DAVIS.

IN the early reign of Queen Elizabeth, the great enterprise of finding a North-western passage was again revived in England. Since the discoveries of Cabot no progress had been made at solving the problem, although two English expeditions had sailed to Northern America.

The first one consisted of two ships, having on board "divers cunning men," one of whom was a canon of St. Paul's, a great mathematician, and wealthy. The ships reached Newfoundland, where one of them was wrecked; the other vessel sailed southward, and then returned to England.

Nine years afterwards, another voyage was made in the same direction by a company of adventurers of highest respectability. This gay band mustered in military array at Gravesend, and having taken the sacrament, went on board ship. They had a long and tedious voyage, during which their buoyant spirits considerably flagged. Having reached Newfoundland, they saw a boat with the "natural people of the country." A barge was fitted out to treat with them; but the savages, alarmed, fled precipitately, relinquishing the side of a bear which they had been roasting.

The coast was barren and desolate, and a famine soon rose to such a pitch as to drive them to the extremity of cannibalism. They had arranged the casting of lots to decide whose life should be sacrificed to save the rest, when a French ship appeared in view. Finding it to be both in good order and well stored with provisions, the English scrupled not to attack and seize it; and in it they made their way to England in a most miserable condition, leaving their own bark to the ejected crew.

Soon afterwards the Frenchmen reached France, and raised such a clamor about the outrage of the Englishmen, that King Henry liberally paid for their losses from his own purse.

The next English expedition to the North-west was planned and conducted by Martin Frobisher, a native of Yorkshire, who subsequently distinguished himself by naval exploits in every quarter of the globe. Frobisher regarded the discovery of a North-west passage "as the only thing of the world, yet left undone, whereby a notable man might become famous;" and for fifteen years in city and court he solicited the means for undertaking the enterprise.

With three small vessels (35, 30, and 10 tons,) Frobisher, on the 8th of June 1576, passed Greenwich where the court then resided, and when opposite the palace fired a salute in honor of the queen, who gazed at the fleet from the window and waved her hand to the departing explorers.

Early in July, Frobisher saw a range of awful and precipitous summits, which, even in the height of summer, were white with snow; this was the southern point of Greenland. He then steered westward, and experienced a severe gale, during which his smallest

vessel sunk beneath the waves with all on board. Appalled at this disaster one of the remaining vessels turned back, but Frobisher in the third one pushed forward, and on the 22d of July reached the ice-bound coasts of Labrador. Sailing northward he came in August to more accessible land, and named it "Meta Incognita."

Seeing seven boats plying along the beach, Frobisher sent out one of his own, the crew of which, by holding up a white cloth, induced a native canoe to approach; but on seeing the ship the people immediately turned back. Frobisher then went on shore, and, by the distribution of presents, enticed one of the natives on board. This person, being well treated with food and drink, made on his return so favorable a report, that nineteen followed his example.

The natives were next day more shy, and with some difficulty one of them, by the allurements of a bell, was drawn on board. Frobisher, having no intention to detain him, sent a boat with five men to put him on shore; but, urged by curiosity, they went on to join the main body of the natives, and were never allowed to return. After spending two days firing guns, and looking for the missing men, Frobisher sailed for home, where he arrived in October.

Although Frobisher had made but little progress towards a western passage, his voyage was considered highly creditable, and interest in the new country was greatly excited from the fact that a large shining stone, which Frobisher had brought home and divided among his friends, was pronounced by the goldsmiths to be gold ore. A new expedition of three ships was immediately organized; England was thrown into a ferment of joy; and Frobisher being invited

to visit the queen, received her hand to kiss, with many gracious expressions.

The new expedition sailed on the 26th of May, 1577 ; on the 8th of June it touched at the Orkneys for fresh water. The poor inhabitants, having, it is probable, suffered from the inroads of pirates, fled from their houses with cries and shrieks, but were soon, by courteous treatment, induced to return.

The English now entered on their perilous voyage through the northern ocean, during which they were much cheered with the perpetual light. At length they touched at the sound or deep indentation of waters known as Frobisher Strait—afterwards said to be a sound, and recently proved such by the researches of the late Captain Hall. The coast, however, was found guarded by a mighty wall of ice, which the ships could not penetrate ; but the captain, with two of his boats, worked his way into the sound, and began to survey the country.

So crude were then the ideas respecting the geography of these regions, that they imagined the coast on their left to be America, and that on their right Asia. Landing on the American side they scrambled to the top of a hill, and erected a column, which, after the great patron of the expedition, was called Mount Warwick. On their return, cries were heard like the lowing of bulls, and a large body of natives ran up to them in a very gay and cordial manner. They began an eager traffic for the trifling ornaments displayed by their visitors, yet declined every invitation to go on board, while the English on their part did not choose to accede to their overtures of going into the country. Frobisher and a companion, meeting two of the natives apart, rashly seized

and began dragging them to the boats, hoping to gain their friendship by presents and courtesy.

On the slippery ground, however, their feet gave way, the Esquimaux broke loose, and found behind a rock their bows and arrows, which they began to discharge with great fury. Frobisher and his comrade, seized with a panic, fled full speed, and the former reached the boat with an arrow sticking in his leg. The crew, imagining that something truly serious must have driven back their commander in such discomfiture, gave the alarm, and ran to the rescue. The two barbarians instantly fled; but one of them was caught and taken to the boat.

Meantime the ships outside were involved in a dreadful tempest, being tossed amid those tremendous ice-islands, the least of which would have been sufficient to have crushed them into a thousand pieces. To avoid dangers which so closely beset them, they were obliged to tack fourteen times in four hours; but with the benefit of the perpetual light, the skill of their steersman, and the aid of Providence, they weathered the tempest, without the necessity of driving out to sea and abandoning the boats. On the 19th, Frobisher came out to the ship with a large store of glittering stone; upon which, says one of the adventurers, "we were all rapt with joy, forgetting both where we were and what we had suffered. Behold," he continues, "the glory of man, — to-night looking for death, to-morrow devising how to satisfy his greedy appetite with gold."

A north west gale now sprang up; before which, like magic, the mighty barriers of ice by which the ships had been shut out melted away. They had now a broad and open passage by which they entered the

sound, which was a strait leading into the Pacific Ocean. In a run of upwards of thirty leagues they landed at different points, and, mounting to the tops of hills, took possession of the country with solemn and sacred ceremonies, in name of her majesty.

On questioning their prisoner, he admitted knowledge respecting the five men captured in the preceding year, but repelled most strenuously the signs by which the English intimated their belief that they had been killed and eaten. However, a dark source of suspicion was soon opened ; for some boats of the natives were found, which, along with bones of dogs, flesh of unknown animals, and other strange things, contained an English canvas doublet, a shirt, a girdle, three shoes for contrary feet,—apparel which, beyond all doubt, belonged to their countrymen lost in the preceding year.

Hoping to recover them, they left a letter in the boat, with pen, ink, and paper, and a party of forty, under Charles Jackman, marched inland to take the natives in the rear, and drive them upon the coast, where Frobisher with his boats waited to intercept them. The wretches had removed their tents into the interior ; but the invaders, after marching over several mountains, descried a cluster of huts, whose inmates hastened to their canoes, and pushed out full speed to sea. They rowed with a rapidity which would have baffled all pursuit, had not Frobisher with his boats held the entrance of the sound and there awaited them.

As soon as the Esquimaux saw themselves thus beset, they landed among the rocks, abandoning their skiffs. The English rushed on to the assault ; but the natives, stationed on the rocks, resisted the land-

ing, and stood their ground with the most savage and desperate valor. Overwhelmed with clouds of arrows, they picked them up, plucking them even out of their bodies, and returned them with fury. On feeling themselves mortally wounded, they plunged from the rocks into the sea, lest they should fall into the hands of the conquerors.

At length, completely worsted, and having lost five or six of their number, they sprang up among the cliffs and eluded pursuit. There fell into the hands of the assailants only two females, who caused some speculation. One was stricken in years, and presented a visage so singularly hideous, that her moccasins were pulled off to ascertain if she was not the great enemy of mankind in disguise. The other female was young, with a child in her arms; and being, from her peculiar costume, mistaken for a man, had been fired at and the child wounded. It was in vain to apply remedies; she licked off with her tongue the dressings and salves, and cured it in her own way. She and the male captive formerly taken appeared to be strangers, but on becoming intimate found much comfort in each other's society, and showed a strong mutual attachment.

Frobisher still cherished hopes of recovering his men. A large party appearing on the top of a hill, signs were made of a desire for a friendly interview. A few of them advanced, and were introduced to the captives. The parties were deeply affected, and spent some time without uttering a word; tears then flowed; and when they at last found speech, it was in tones of tenderness and regret, which prepossessed the English much in their favor. Frobisher now came forward, and propounded that on condition of restor-

ing his five men, they should receive back their own captives, with the addition of sundry of those little gifts and presents on which they set the highest value. This they promised, and also to convey a letter to the prisoners, who doubtless at this time were not alive.

Afterward three men appeared holding up flags of bladder, inviting the invaders to approach; but the latter, who saw the heads of others peeping from behind the rocks, resolved to proceed with the utmost caution. The natives began by placing in view large pieces of excellent meat; and when their enemy could not be caught by that bait, a man advanced very close, feigning lameness, and seeming to offer himself an easy prey. Frobisher allowed a shot to be fired, by which the person was cured at once, and took to his heels. Seeing all their artifices fail, the barbarians determined upon main force, and pouring down to the number of a hundred, discharged their arrows with great rapidity. They even followed a considerable way along the coast, regardless of the English shot; but the boats were too distant from the shore to suffer the slightest annoyance. Several of the seamen importuned Frobisher to allow them to land and attack; but this he refused, as only calculated to divert them from the main object, and to cause useless bloodshed.

The 21st of August had now arrived, the ice was beginning to form around the ships, and, though little progress had been made towards China, the seamen had put on board two hundred tons of the precious ore. They therefore mounted the highest hill, fired a volley in honor of the Countess of Warwick, and made their way home.

Notwithstanding the vicissitudes which had marked

this voyage, its arrival was hailed with the utmost exultation. Enthusiasm and hope, both with the queen and the nation, rose higher than ever. The delusion of the golden ore continued in full force, and caused those desolate shores to be regarded as another Peru. Special commissioners, men of judgment, art, and skill, were named by her majesty to ascertain both the quality of the ore and the prospects of the voyage to India. After due inquiry, a most favorable report was made on both subjects, and it was recommended not only that a new expedition on a great scale should be fitted out, but a colony established on that remote coast, who might at once be placed in full possession of its treasures, and be on the watch for every opportunity of farther discovery.

To brave the winter of the Polar world was a novel and daring enterprise; yet such was then the national spirit, that the appointed number of a hundred was quickly filled up. There were forty mariners, thirty miners, and thirty soldiers, in which last number were oddly included, not only gentlemen, but gold-finers, bakers, and carpenters. Materials were sent on board the vessels, which, on being put together, might be converted into a fort or house. The squadron fitted out was the largest that had yet adventured to plough the northern deep. It consisted of fifteen vessels, furnished by various ports, especially by those of the west, and the rendezvous took place at Harwich on the 27th May, 1578, whence they sailed on the 31st. The captains waited on the queen at Greenwich, and were personally addressed by her in the most gracious manner; Frobisher receiving a chain of gold, and the honor of kissing her majesty's hand.

It is notorious that expeditions got up on the great-

est scale, and with the most ample means, usually prove the most unfortunate. On reaching the opening of Frobisher's Strait, the navigators found it frozen over from side to side, and barred, as it were, with successive walls, mountains, and bulwarks. A strong easterly wind had driven numerous icebergs upon the coast, and hence the navigation amid these huge moving bodies soon became most perilous. The *Dennis*, a large vessel, on board of which was part of the projected house, received such a tremendous blow from a mountain of ice, that it went down instantly, though the other ships, hastening to its aid, succeeded in saving the men. This spectacle struck panic into the other crews, who felt that the same fate might next moment be their own.

The danger was much augmented when the gale increased to a tempest, and the icy masses, tossing in every direction, struck the vessels furiously. Invention was now variously at work to find means of safety. Some moored themselves to these floating islands, and being carried about along with them, escaped the outrageous blows which they must otherwise have encountered. Others held suspended by the sides of the ship oars, planks, pikes, poles, everything by which the violence of the shocks might be broken; yet the ice, "aided by the surging of the sea and billow," was seen to break in pieces planks three inches thick. Frobisher considers it as redounding highly to the glory of his poor miners and landsmen, wholly unused to such a scene, that they faced with heroism the assembled dangers that besieged them round. "At length, it pleased God with his eyes of mercy to look down from heaven,"—a brisk southwest wind dispersed the ice, and gave them an open sea through which to navigate.

After a few days spent in repairing the vessels, and stopping up the leaks, Frobisher bent afresh all his efforts to penetrate inward to the spot where he was to found his colony. After considerable effort, he made his way into a strait, when he discovered that he was sailing between two coasts; but amid the gloomy mists, and the thick snow which fell in this northern midsummer, nothing could be distinctly seen. As, however, clear intervals occasionally occurred, affording partial glimpses of the land, the surmise arose that this was not the shore along which they had formerly sailed. Frobisher would not listen to a suggestion which would have convicted him of having thrown away much of his time and labor. He still pressed onward. Once the mariners imagined they saw Mount Warwick, but were soon undeceived. At length, the chief pilot stood up and declared, in hearing of all the crew, that he never saw this coast before.

Frobisher still persevered, sailing along a country more populous, more verdant, and better stocked with birds, than the one formerly visited. In fact, this was probably the main entrance into Hudson's Bay, by continuing in which he would have made the most important discoveries. But all his ideas of mineral wealth and successful passage were associated with the old strait; and, on being obliged to own that this was a different one, he turned back to the open sea. In this retreat the fleet was so involved in fogs and violent currents, and so beset with rocks and islands, that the sailors considered it only by a special interposition of Providence that they were brought out in safety.

When they had reached the open sea, and arrived

at the mouth of the desired strait, it was almost as difficult to find an entrance. However, Frobisher was constantly on the watch, and wherever there appeared any opening, it is said "he got in at one gap and out at another," till at length he reached his purposed haven. Before, however, the crews were completely landed and established, the 9th of August had come, thick snows were falling, and it behooved them to hold a solemn consultation as to the prospects of the projected colony. There remained of the house only the materials of the south and east sides, a great part of the bread had been spoiled, and there was no adequate provision for a hundred men during a whole year.

Renouncing the idea of settlement, Frobisher still asked his captains whether they might not, during the short remaining interval, attempt some discovery to throw a redeeming lustre on this luckless voyage; but, in reply, they urged the advanced season, the symptoms of winter already approaching, and the danger of being enclosed in these narrow inlets, where they would be in the most imminent danger of perishing;—in short, that nothing was now to be thought of but a speedy return homeward. This was effected, not without the dispersion of the fleet, and considerable damage to some of the vessels.

The failure of successive attempts, and especially of one got up with so much cost, produced its natural effect in England. The glittering stone, which was to have converted this northern Meta into another Peru, was never more heard of; a few careful assays having established its utter insignificance. Frobisher strongly advocated another voyage to the North-west, but without success, and was obliged to

seek in other climates employment for his daring and active spirit. He accompanied Sir Francis Drake to the West Indies, and commanded one of the largest ships in the armament which opposed the Spanish armada, fighting with such bravery, that he was decorated with the honors of knighthood. Being afterward sent to assist Henry IV. against the League, and employed in the attack of a small fort on the coast of France, he received a wound which proved fatal in November, 1594.

The "Meta Incognita" or "unknown land" discovered by Frobisher, lies between Hudson's Strait and Frobisher's Strait. Capt. Hall passed the period of his first visit to the north in this vicinity, and found many relics, as he supposes, of the Frobisher expedition.

Sir Humphrey Gilbert, a man of high character both as a soldier and civilian, had been much interested in the voyages of his countrymen, and in 1578 he obtained from Elizabeth a patent conferring sole jurisdiction over a large territory in America, on condition that he should plant a colony there within six years. His half-brother, Sir Walter Raleigh was also engaged in the enterprise.

In 1583, Sir Humphrey set out with a fleet of five vessels, but one of them put back on account of sickness. On reaching St. John's harbor, New Foundland, Sir Humphrey summoned some Spanish and Portuguese fishermen there, to witness the ceremony of taking possession in the name of the English sovereign, an operation which he performed by digging a turf, and setting up a pillar to which the arms of England were affixed. Silver ore, as they supposed, was discovered and taken on board the vessels, one

of which was abandoned, while with the remainder Sir Humphrey pursued his voyage along the coast towards the south. On his way, the largest remaining ship with its ore was wrecked, and a hundred souls perished.

Return was now considered necessary, and in the midst of terrible storms and tempests, the prows were turned homeward. Sir Humphrey had chosen to sail in a little tender, called the Squirrel, and when the storm came on he was urged to shift his flag to a larger vessel. But he refused to do so, saying:

"I will not desert my little company, with whom I have passed so many storms and perils."

The gale increased; lights were burned at night, and the little Squirrel, for a long time, was seen gallantly contending with the waves. Once she came so near another ship that its officers could see Sir Humphrey sitting by the mainmast, with a book in his hand, reading. He looked up, and cried cheerily, "We are as near to Heaven by sea as by land." About midnight, all at once, the lights were extinguished; and in the morning nothing was seen of the good Sir Humphrey or his little ship.

In 1585 the spirit of discovery was again roused. Merchants of London fitted out two vessels, the Sunshine and Moonshine, which were placed under the command of John Davis, a determined seaman, endowed with much courtesy and good humor, by which he was likely to render himself acceptable to the rude natives of those inhospitable shores: to promote which laudable purpose, he was provided not only with a supply of the trifling gifts suited to their taste, but with a band of music to cheer and recreate their spirits.

THE MIDDLE PASS MATTING BAY

Davis sailed on the 7th of June, 1585. On the 19th of July, as the seamen approached the Arctic boundary, they heard, amid a calm sea beset with thick mist, a mighty roaring, as of the waves dashing on a rocky shore. The captain and master pushed off in the boat to examine this supposed beach, but were much surprised to find themselves involved amid numerous icebergs, while all this noise had been caused by the rolling and beating of these masses against each other.

Next day they came in view of Greenland, which appeared the most dreary and desolate ever seen; "deformed, rocky, and mountainous, like a sugar-loaf, standing to our sight above the clouds. It towered above the fog like a white list in the sky, the tops altogether covered with snow, the shore beset with ice, making such irksome noise that it was called the *Land of Desolation*."

After sailing for several days along this dreary shore, Davis pushed out north-westward into the open sea, hoping in "God's mercy to find our desired passage." On the 29th he came in view of a land in 64° north latitude, which was still only Greenland; but as the wind was unfavorable for proceeding westward, the air temperate, and the coast free from ice, he resolved to go on shore and take a view of the country and people. In the company of two others, he landed on an island, leaving directions for the rest to follow as soon as they should hear any loud signal. The party mounted the top of a rock, whence they were espied by the natives, who raised a lamentable noise, with loud outcries like the howling of wolves. Davis and his comrades hereupon struck up a high note, so modulated, that it might at once be alluring to the natives, and might summon his own crew to deeds

either of courtesy or valor. Burton, the master, and others, hastened, well armed, yet with the band of music playing, and dancing to it with the most inviting signs of friendship.

In accordance with this gay summons, ten canoes hastened from the other islands, and the people crowded round the strangers, uttering in a hollow voice unintelligible sounds. The English continued their friendly salutations, while the other party still showed jealousy, till at length one of them began pointing towards the sun and beating his breast. These signs being returned by John Ellis, master of the *Moonshine*, the natives were induced to approach; and being presented with caps, stockings, gloves, etc., and continuing to be hailed with music and dancing, their fears gave place to the most cordial amity.

Next day there appeared thirty-seven canoes, the people from which kindly invited the English on shore, showing eager impatience at their delay. Davis manned his boats and went to them; one of them shook hands with him, and kissed his hand, and the two parties became extremely familiar. The natives parted with every thing, the clothes from off their backs, their buskins of well-dressed leather, their darts, oars, and five canoes, accepting cheerfully in return whatever their new visitors chose to present.

Davis next steered directly across the strait, or rather sea, which still bears his own name. On the 6th of August he discovered high land, which he named Mount Raleigh, being part of Cumberland Island. Here, anchoring in a fine road, the seamen saw three white animals, which seemed to be goats. Desirous of fresh victuals and sport, they pursued them, but discovered instead three monstrous white bears.

Davis, after coasting about for some days, again found himself at the cape which he had at first reached on his crossing from the opposite shore of Greenland. This promontory, which he called God's Mercy, he now turned, when he found himself in a sound stretching north-westward, twenty or thirty leagues broad. After ascending it sixty leagues, he found an island in the mid-channel. About the end of August, however, being involved in fogs and contrary winds, he determined to suspend operations for the season and return to England.

On one of the islands in this sound the seamen heard dogs howling, and saw twenty approach, of wolf-like appearance, but in most peaceful guise. Impressed, however, with the idea that only animals of prey could be found on these shores, they fired and killed two, round one of whose necks they found a collar, and soon after discovered the sledge to which he had been yoked.

Davis sailed on a second expedition on the 7th of May 1586 with his two former vessels, and another one called the Mermaid. On the 29th of June he reached the scene of his former visit in Greenland. The natives came out in their canoes at first with shouts and cries; but, recognizing their companions of the former year, they hastened forward, and hung round the vessel with every expression of joy and welcome.

Davis, seeing them in such favorable dispositions, went ashore and distributed presents. The most intimate acquaintance was now begun; yet they never met the strangers anew without crying, "*Iliaout!*" beating their breasts and lifting their hands to the sun, by which a fresh treaty was ratified.

The two parties amused themselves by contests in bodily exercises. The Esquimaux could not match their opponents in leaping; but in wrestling they showed themselves strong and skillful, and threw some of the best English wrestlers. By degrees they began to manifest less laudable qualities. They exercised many and solemn incantations, though, Davis thanks God, without any effect. They kindled a fire by rubbing two sticks against each other, and invited him to pass through it; but he, in contempt of their sorcery, caused the fire to be trodden out and the embers thrown into the sea.

The natives, however, soon began to show less amiable traits, and finally reached the highest pitch of audacity. They stole a spear, a gun, a sword, cut the cables and even the Moonshine's boat from her stern. The leading personages of the crew remonstrated with Davis, that for their security he must "dissolve this new friendship, and leave the company of the thievish miscreants." Davis fired two pieces over their heads, which "did sore amaze them," and they fled precipitately; but in ten hours they again appeared with many promises and presents of skins; when, on seeing iron, "they could in nowise forbear stealing." The commander was again besieged with the complaints of his crew; however, "it only ministered to him an occasion of laughter," and he told his men to look out for their goods, and not to deal hardly with the natives, who could scarcely be expected in so short a time "to know their evils."

Davis now undertook an expedition into the interior. He sailed up what appeared a broad river, but which proved only a strait or creek. A violent gust of wind having obliged him to seek the shelter of

land, he attempted to ascend a very lofty peak; but "the mountains were so many and so mighty, that his purpose prevailed not." While the men were gathering muscles for supper, he was amused by viewing for the first time in his life, a water-spout, which he describes as a mighty whirlwind taking up the water and whirling it round for three hours without intermission.

During the captain's absence matters had become worse with the Esquimaux; they had stolen an anchor, cut the cable, and even thrown stones of half a pound weight against the Moonshine. Davis invited a party of them on board, made them various little presents, taught them to run to the topmast, and dismissed them apparently quite pleased. Yet no sooner had the sun set than they began to "practise their devilish nature," and threw stones into the Moonshine, one of which knocked down the boatswain. The captain's meek spirit was at length kindled to wrath, and he gave full warrant for two boats to chase the culprits; but they rowed so swiftly that the pursuers returned with small content.

Two days after, five natives presented themselves with overtures for a fresh truce; but the master came to Davis, remonstrating that one of them was "the chief ringleader, a master of mischief," and was vehement not to let him go. He was made captive, and, a fair wind suddenly springing up, the English set sail, and carried him away, many doleful signs being then exchanged between him and one of his countrymen; however, on being well treated, and presented with a new suit of frieze, his spirits revived, he became a pleasant companion, and used occasionally to assist the sailors.

On the 17th of July the mariners descried a land diversified with hills, bays, and capes, and extending farther than the eye could reach ; but what was their horror on approaching, to find that it was only "a most mighty and strange quantity of ice !" It was, in fact, that great barrier known as the Middle Pack.

As they coasted along this mighty field, a fog came on, by which the ropes, shrouds, and sails were all fast frozen,—a phenomenon that, on the 24th of July, appeared more than strange. Dismayed by these observations, the seamen considered the passage hopeless, and, in a respectful yet firm tone, warned Davis, that by "his over-boldness he might cause their widows and fatherless children to give him bitter curses."

Davis was willing to consider their case ; yet, anxious not to abandon so great an enterprise, he determined to leave behind him the Mermaid, and to push on in the Moonshine with the boldest part of his crew. Having found a favorable breeze, he at last, on the 1st of August, turned the ice, and in lat. 66° 33' reached land ; along which he now coasted southward for about ten degrees, entangled among a number of islands, and missing, in his progress, the inlets to Hudson's Bay. On the coast of Labrador, five men who landed were beset by the natives, and two of them killed and two wounded. Davis then returned to England.

Through the influence of his friend Mr. Sanderson, Davis sailed on a third expedition with the Sunshine, the Elizabeth, and a pinnace, and on the 16th of June, 1587, arrived among his old friends on the coast of Greenland. The natives received him as before with the cry of *iliaout* and the exhibition of skins, but lost

THE LAND OF DESOLATION.

FREIGHTED ICEBERG.

no time in the renewal of their former system of thieving.

It was now arranged that the two large vessels should remain to fish, while Davis in the pinnace should stretch out into a higher latitude with a view to discovery. In pursuance of this plan he took his departure, and, continuing to range the coast to the northward, on the 28th he reached a point which he named Sanderson's Hope, in upwards of 72° , still finding a wide open sea to the west and north. Here, the wind having shifted, Davis resolved to hold on a western tack across this sea, and proceeded for forty leagues without sight of land or any other obstruction, when he was arrested by the usual barrier of an immense bank of ice. Tempted by an apparent opening, Davis involved himself in a bay of ice, and was obliged to wait the moment when the sea beating and the sun shining on this mighty mass should effect its dissolution.

At length, on the 19th of July, he came in view of Mount Raleigh, and at midnight found himself at the mouth of the inlet discovered in the first voyage, and which has since been called Cumberland Strait. Next day he sailed across its entrance, and in the two following days ascended its northern shore, till he was again involved among numerous islands. He now concluded this strait to be an enclosed gulf, and retreated along the southern shore. He now crossed the mouth of an extensive gulf, in one part of which his vessel was carried along by a violent current, while in another the water was whirling and roaring as is usual at the meeting of tides. This was evidently the grand entrance to Hudson's Bay.

Davis now hastened to the point of rendezvous

fixed with the two other vessels; but, to his deep disappointment and just indignation, he found that they had departed. It was not without hesitation that, with his small stock of provisions he ventured to sail for England; but he arrived safely.

Davis had succeeded in reaching a much higher latitude than any former navigator, and, with the exception of the barrier of ice on one side, had found the sea open, blue, of vast extent, and unfathomable depth. He considered, therefore, that the success of a spirited attempt was almost infallible. But three failures had exhausted all interest in the subject, and the invasion by the Spanish Armada which soon followed, engaged for a season all the energies of the nation.

Davis tried in vain to procure means for another Arctic Expedition. He subsequently made several voyages to the East Indies, in the service of the Dutch, and was killed during a fight with Japanese pirates on the coast of Malacca in 1605.

CHAPTER VI.

ARCTIC VOYAGES OF WEYMOUTH, KNIGHT, AND HUDSON.

In 1602, the Muscovy Company and the Levant Company united in new efforts for a North-west route, and sent out George Weymouth with two vessels, the *Discovery* and *Goodspeed*, which sailed on the 2d of May.

On the 28th of June, Weymouth came in view of a snow-clad promontory on the American coast. The vessels were tossed to and fro by violent currents and involved in thick fogs, and they came quite near to an iceberg on which some of the crew landed. Hearing a great sound like the dashing of waves on the shore, they approached it, and were dismayed to find it "the noise of a great quantity of ice, which was very loathsome to be heard." The mist became so thick, that they could not see two ships' length, and on attempting to take down the sails, they were astonished to find them so fast frozen to the rigging that in "this chiefest time of summer they could not be moved." Next day they renewed the attempt; but it was only by cutting away the ice from the ropes that they could be made to move through the blocks. The following day the fog lay so thick and froze so

fast, that ropes, sails, and rigging remained immovable.

These phenomena produced a disastrous effect on the minds of the sailors, who began to hold secret conferences, ending in a conspiracy "to bear up the helm for England." It was proposed to seize Weymouth, and confine him in his cabin till he gave his consent; but the captain, receiving notice of this nefarious design, called the seamen before him, and in presence of Mr. Cartwright the preacher, and Mr. Cobreth the master, called upon them to answer for thus attempting to overthrow a voyage fitted out at such ample cost by the honorable merchants.

The men stood firm, and produced a paper signed by themselves, in which they justified the proposed step as founded on solid reason, without any tincture of fear or cowardice. They represented, that if they should suffer themselves to be enclosed in an unknown sea, by this dreadful and premature winter, they would not only be in imminent danger of perishing, but could not hope to commence their career of discovery next year sooner than May; while by setting sail in due time from England they might easily reach this coast in that month. Weymouth retired to his cabin to deliberate, when he heard it announced that the helm was actually borne up. Hastening on deck, and asking who had done this, he was answered, "One and all;" and he found the combination such as it was impossible to resist, though he took occasion afterward to chastise the ringleaders. The men, however, declared themselves ready to hazard their lives in any discovery which might be attempted to the southward.

Descending the coast, Weymouth found himself at the entrance of an inlet, into which he sailed in a

south-west direction, a hundred leagues; but encountering fogs and heavy gales, and finding the season far spent, he deemed it necessary to regain the open sea. This inlet was in fact the grand entrance of Hudson's Bay.

In 55° Weymouth found a fair land, consisting of islands and "goodly sounds," apparently the place where the Moravian settlement of Nain was afterward formed. Soon after, a dreadful hurricane from the west seemed to take up the sea into the air, and drove the ships before it with the utmost impetuosity. Had it been from any other quarter they must have been dashed to pieces on rocks; however they ranged through the open sea, and in the greatest extremity "the Lord delivered us his unworthy servants." They had now an easy navigation to England.

No farther attempts were made till 1606, when East India merchants fitted out a vessel of forty tons under John Knight, who had been employed in the Danish voyages to Greenland. On the 19th of June he had reached the coast of Labrador, but the vessel had been so much damaged by collisions with ice that it became necessary to repair it thoroughly, and for this purpose it was hauled ashore in a little cove.

On the 26th, Knight, with some of his men well armed, went across to the opposite coast in a boat, to take a survey of the country. Here the captain with two of his officers, went over a hill, leaving three men in charge of the boat, who waited the whole day in anxious expectation of the return of the party; they then sounded trumpets, fired muskets, and made other signals but without effect. After waiting till eleven at night, they gave up hopes, and returned to the ship with the doleful tidings. The crew were

struck with the deepest dismay at having thus lost their captain and best officers, and being themselves left in such deplorable circumstances. The boat was fitted out next morning for search, but could not cross the channel on account of the ice.

On the night of the 28th, as the boatswain was keeping watch in advance of the tents, he suddenly saw rushing through the darkness a great body of men, who, on descrying him, let fly their arrows. He instantly fired, and gave the alarm; but before the crew could start from bed and be mustered, the shallop was filled with fifty savages, who, with loud cries and menacing gestures, showed themselves prepared for immediate attack. The English mustered only eight men and a large dog, and though the rain fell in torrents, they determined rather to perish bravely, assailing this savage enemy, than to wait their onset. They advanced, therefore, placing the dog foremost. This bold front appalled the savages, who leaped into their boats, and made off with all speed; but they were entangled in the ice, and detained a considerable time, during which the pursuers continued firing, and the savages were heard "crying to each other, very sore."

The mariners, placed in this alarming situation, made all the haste they could to fit their shattered bark for again taking the sea. They had first to cut a way for her through the ice; but they had nothing which could be called a rudder, and the leaks were so large, that the sailors could scarcely enjoy half an hour's relief from the pump. At length they succeeded in reaching the coast of Newfoundland, and found, among the fishing vessels on that station, friends who supplied all their wants. After twenty

days spent in repairing their ship they sailed for home.

Captain Henry Hudson, a Londoner, of whose early life very little is known, was employed, as he says, "by certaine worshipfull merchants of London, for to discover a passage by the North Pole, to Japan and China." With only ten men and his little son, he sailed in a small vessel on the first of May, 1607, with instructions to sail, if possible, directly over the North Pole. This was the first attempt to make this hazardous trip, and the first recorded voyage of this eminent navigator.

On the 13th of June, the ship was involved in thick fog, the shrouds and sails being frozen; but when it cleared next morning, the sailors descried a high and bold headland, on Greenland coast, mostly covered with snow, behind which rose a castellated mountain, named the Mount of God's Mercy. Rain now fell, and the air felt temperate and agreeable. They steered eastward to clear this coast; but, after being for some time enveloped in fogs, again saw land, very high and bold, and without snow even on the top of the loftiest mountains. To this cape, in 73° , they gave the name of Hold-with-Hope.

Hudson now took a north-eastward direction, and on the 27th, faintly perceived, amid fogs and mist, the coast of Spitzbergen. He still pushed northward, till he passed the 79th degree of latitude, where he found the sun continually ten degrees above the horizon, yet the weather piercingly cold, and the shrouds and sails often frozen. The ice obliged him to steer in various directions; but embracing every opportunity, he pushed on, as appeared to him, to 81° , and saw land still continuously stretching as far as

82°. He returned, coasting along Spitzbergen, some parts of which appeared very agreeable; and on the 15th of September arrived in the Thames.

On Hudson's return from Spitzbergen, the London merchants still hoping to find a route to the North-east, sent him out on a voyage in that direction. On the 3d of June, 1608, he passed the North Cape, and pushed on to the north and east till he reached the latitude of 75°, when he found himself entangled among ice. He at first endeavored to push through, but failing in this attempt, turned and extricated himself with only "a few rubs." On the 12th of June he experienced a thick fog, and had his shrouds frozen; but the sky then cleared, and afforded bright sunshine for the whole day and night. On the 15th, Thomas Hilles and Robert Rayner solemnly averred, that, standing on deck, they had seen a mermaid. This marine maiden is described as having a female back and breast, a very white skin, and long black hair flowing behind; but on her turning round they descried a tail as of a porpoise, and speckled like a mackerel.

Hudson continued to push on eastward, between the latitudes of 74° and 75°. On the 25th, heavy north and north-easterly gales, accompanied with fog and snow, obliged him to steer south-easterly; and this course brought him to the coast of Nova Zembla. Here, he concluded that it was fruitless to attempt to hold a more northerly course and resolved to try the old and so often vainly-attempted route of the Waygatz.

From this he was diverted by the view of a large sound, which appeared to afford an equally promising opening. On its shores also were numerous herds

of walrus, from which he hoped to defray the expense of the voyage. Nova Zembla, on the whole, seen under this Arctic midsummer, presented to him somewhat of a gay aspect. He says, it is "to man's eye a pleasant land; much mayne land, with no snow on it, looking in some places green, and deer feeding thereon." The sound, however, terminated in a large river, and the boats soon came to anchorage in shallow water. The ice now came in great masses from the south, "very fearful to look on;" and though "by the mercy of God and His mighty help," Hudson escaped the danger, yet by the 6th of July he was "void of hope of a north-east passage," and, determining to put his employers to no farther expense, hastened home to England. The "worshipfull merchants," discouraged by these failures, refused to fit out any more expeditions for him.

The bold Englishman now sought employment from the Dutch East India Company, and sailed from the Texel under their auspices in a little vessel called the Half-Moon, with a crew of twenty men, on the 25th of March 1609.

On the 5th of May he passed the North Cape, and on the 19th came in view of Wardhuys. Here he turned his prow and steered across the Atlantic to America. His reasons for so doing are not known; but it is conjectured that his seamen accustomed to seek India by the tropical route, were alarmed by the fogs, tempests, and floating ice of the north, and that Hudson preferred to seek for a north-western route.

On the 2d of July Hudson reached the coast of Newfoundland, and then proceeding southward visiting several places along the coast, he arrived in August off Chesapeake Bay, where John Smith at that

time was engaged in founding the first English settlement in America. Hudson then sailed northward, and came to anchor in what is now known as the Lower Bay of New York City.

After ascending the Hudson River for about a hundred and fifty miles, Hudson began to perceive that the track to India was yet undiscovered; so he turned his prow southward and beat slowly down the stream, having several fights with the natives on the way.

On the 4th of October he left New York Bay, and proceeded to England, where he was detained for a while by an order of the English court, who were jealous of the enterprise of the Dutch.

Hudson sailed on his last and lamentable voyage on the 17th of April, 1610. His one ship was provisioned for six months, and had been fitted out by eminent Englishmen. On the 11th of May he descried the eastern part of Iceland, and was enveloped in a thick south fog—hearing the sea dashing against the coast without seeing it. He was thus obliged to come to anchor; but, as soon as the weather cleared, he proceeded westward along the coast till he reached Snow Hill (Snaefell,) which rears its awful head above the sea that leads to the frozen shores of Greenland. On their way the navigators saw Hecla, the volcano of which was then in activity, vomiting torrents of fire down its snowy sides, with smoke ascending to the sky—an object not only fearful in itself, but which struck them with alarm as an indication of unfavorable weather.

Leaving the Icelandic coast they now sailed westward, and, after being deceived by illusory appearances of land, at length saw the white cliffs of Greenland towering behind a mighty wall of ice. Without

ESQUIMAUX DOG TEAMS.

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ESQUIMAUX SNOW HOUSES.

attempting to approach the coast, Hudson sailed towards the south-west, and passed what he imagined to be Frobisher's Strait, which in fact long continued to be laid down on the coast of Greenland. Hudson now rounded Cape Farewell, and "raised the Desolations," making careful observations of those coasts, which he found not well laid down on the charts. The mariners soon began to descry, floating along, the mighty islands of ice,—a sight which appalled all but the stoutest hearts. Onward they sailed, however, sometimes enjoying a clear and open sea, but often encompassed by these mighty masses, or by the small and drifting heaps; and at length they had to steer as it were between two lands of ice. They sometimes moored themselves, on occasions of peril, to these icebergs; but seeing one of them fall with a tremendous crash into the sea, they no longer trusted to such a protection.

On the 25th of June land appeared to the north, was again lost sight of, and afterward discovered to the south; so that they found themselves at the broad entrance of the channel which has since obtained the name of Hudson's Strait. They were now still more troubled with ice in various forms, particularly that of large islands standing deep in the water, which were more difficult to avoid from the violent ripples and currents. Thus they were often obliged, especially amid thick fogs, to fasten themselves to the largest and firmest of these masses, upon which they used to go out from time to time to procure the water melted in the hollows, which proved to be sweet and good.

Amid these vicissitudes many of the sailors became fearful and some of them sick, and Hudson to encourage them called them together and showed them his

chart, from which it appeared that they had penetrated farther into the straits by a hundred leagues than any former expedition; he then put it to vote whether they should proceed on or not.

This was a bold experiment, but did not succeed. Some, it is true, expressed themselves "honestly respecting the good of the action;" others declared they would give nine-tenths of all they were worth, so that they were safe at home; others said they did not care where they went, so they were out of the ice.

Hudson, vexed and disappointed, broke up the conference, and determining to follow his own course made his way onward, having sometimes a wide and clear sea, and being occasionally involved amid mountains of ice. Certain rocky islands, in which he found a tolerable harbor, were called "Isles of God's Mercy;" but even this refuge was rendered dangerous by hidden reefs; and the island adjoining to it contained only "plashes of water and riven rocks," and had the appearance of being subject to earthquake.

At length they arrived at a broad opening, having on each side capes to which Hudson gave the names of the two chief patrons of the voyage, Wolstenholme and Digges. Landing at the latter and mounting a hill, the men descried some level spots abounding in sorrel and scurvy grass—plants most salutary in this climate; while herds of deer were feeding, and the rocks were covered with unexampled profusion of fowls. Seeing such ample materials both for sport and food, the crew, who had ever shown the most anxious concern for their own comfort, earnestly besought Hudson to allow them to remain and enjoy themselves for a few days on this agreeable spot; but he would not consent as

the season for discovery was rapidly passing away.

After proceeding a short distance through the opening, the coasts on each side were seen to separate, and he beheld before him an ocean-expanse, to which the eye could discover no termination. It seemed to him, doubtless, a portion of the mighty Pacific, though really Hudson's Bay. Here, however, Hudson's narrative closes, without expressing those feelings of pride and exultation which must have filled his mind at this promised fulfillment of his highest hopes. The narrative of Pricket, one of Hudson's men, must be the foundation for the remaining history of the voyage.

The 3d of August had now arrived, a season at which the boldest of northern navigators had been accustomed to think of returning. Little inclined to such a course, Hudson continued to sail along the coast on the left, hoping probably before the close of Autumn to reach some cultivated and temperate shore where he might take up his winter-quarters. The shores along this bay, though not in a very high latitude, are subject to a climate the most rigorous and inclement. Entangled in the gulfs and capes of an unknown coast, struggling with mist and storm, and ill-seconded by a discontented crew, he spent three months without reaching any comfortable haven.

It was now the 1st of November, the ice was closing in on all sides, and nothing remained but to meet the cheerless winter which had actually begun. The sailors were too late at attempting to erect a wooden house; yet the cold, though severe, does not seem to have reached any perilous height. Their chief alarm was respecting provisions, of which they had now only a small remnant left. Hudson took active measures to relieve this want, and offered a reward

to whoever should kill beast, fish, or bird; and "Providence dealt mercifully," in sending such a supply of white partridges, that in three months they killed a hundred dozen. In the spring these birds disappeared, but were succeeded by flocks of geese, swans, and ducks, not denizens of the spot, but on their flight from south to north. When these were gone the air no longer yielded a supply, but the sea began to open, and having on the first day taken five hundred fishes, they were much encouraged; but their success at fishing did not continue; and being reduced to great extremity they searched the woods for moss.

Hudson now undertook an excursion with a view to open an intercourse with the natives, but they fled, setting fire to the woods behind them. Parley was obtained with one, who was loaded with gifts, yet he never returned. Discontents arose as to the distribution of the small remaining portion of bread and cheese, to allay which the captain made a general and equal partition of the whole. This was a bad measure among such a crew, many of whom knew not how "to govern their share," but greedily devoured it as long as it lasted.

Hudson had from the first to struggle with an unprincipled, ill-tempered crew, void of any concern for the ultimate success of the voyage. He had probably hoped, as the season should advance, to push on southward and reach next summer the wealthy regions which he was commissioned to search. The sailors, on the contrary, had fixed their desire on "the cape where fowls do breed," the only place where they expected to obtain both present supply and the means of returning to England. Ringleaders were not want-

ing to head this growing party of malcontents. At the entrance of the bay the captain had displaced Ivet, the mate, who had shown strong propensities for returning, and appointed in his room Bylot, a man of merit, who had always shown zeal in the general cause. He had also changed the boatswain.

Among the crew was a wretch named Green, whom Hudson had taken on board and endeavored to reclaim. He was possessed of talents which had made him useful, and even a favorite with his superior ; and among other discontents of the crew, it was reckoned one that a veil was thrown over several flagrant disorders of which he had been guilty. Yet some hot expressions of Hudson so acted on the fierce spirit of this ruffian, that, renouncing every tie of gratitude and all that is sacred among mankind, he became the chief in a conspiracy to seize the vessel and expose the commander to perish.

After some days' consultation, the time was fixed for the perpetration of a horrible atrocity. On the 21st of June, 1611, Green and Wilson the boatswain, came into Pricket the narrator's cabin, and announced their fatal resolution ; adding, that they bore him so much good-will as to wish that he should remain on board. Pricket avers most solemnly, that he exhausted every argument which might induce them to desist from their horrid purpose, beseeching them not to do so foul a thing in the sight of God and man, which would for ever banish them from their native country, their wives, and children. Green wildly answered, that they had made up their minds to go through with it or die, and that they would rather be hanged at home than starve here. An attempt was then made to negotiate a delay of three, two, or even one day,

but all without effect. Ivet declaring that he would justify in England the deed on which they had resolved. Pricket according to his own story, then persuaded them to delay till daylight the accomplishment of their crime.

Daybreak approaching, Hudson came out of his cabin, when he was instantly set upon by Thomas, Bennet, and Wilson, who seized him and bound his hands behind his back; and on his eagerly asking what they meant, told him he should know when he was in the shallop. Ivet then attacked King, the carpenter, known as the commander's most devoted adherent. That brave fellow, having a sword, made a formidable resistance, and would have killed his assailant had not the latter been speedily reinforced. The mutineers then offered to him the choice of continuing in the ship; but he absolutely refused to be detained otherwise than by force, and immediately followed his master whom the conspirators were already letting down the sides of the vessel. Hudson's son, a boy, was also sent into the boat.

The mutineers then called from their beds and drove into the boat, six sick and infirm sailors whose support would have been burdensome. They threw after them the carpenter's box, with some powder and shot, and cutting loose from the boat sailed away. Hudson and his companions thus abandoned, were never heard of more; and undoubtedly perished on those remote and desolate shores.

As soon as the mutineers had time to reflect, rueful misgivings began to arise. Even Green, who now assumed command, admitted that England at this time was no place for them, nor could he contrive any better scheme than to keep the high sea till, by some

means or other, they might procure a pardon. The vessel was now embayed and detained for a fortnight amid fields of ice which extended for miles around it; and, but for some cockle-grass found on an island the crew must have perished by famine. Disputes with respect to the steerage arose between Ivet and Bylot, who alone had any pretensions to skill; but the latter at length guided them to Cape Digges, the longed-for spot, the breeding place for fowls, clouds of which still continued to darken the air. The party immediately landed, spread themselves among the rocks, and began to shoot.

While the boat was on shore they saw seven canoes rowing towards them. The savages came forward beating their breasts, dancing and leaping, with every friendly sign. The utmost intimacy commenced, the parties went backward and forward, showed each other their mode of catching fowls, and made mutual presents and exchanges. In short, these appeared the most kind and simple people in the world, and "God so blinded Henry Green," that he viewed them with implicit confidence.

One day, amid the height of this intimacy, Pricket, sitting in the boat, suddenly saw a native close to him with a knife uplifted and ready to strike. In attempting to arrest the blow his hand was cut, and he could not escape three wounds; after which he got hold of the handle of the knife and wrenched it from the assassin, whom he then pierced with his dagger. At the same time a general attack was made on the English crew dispersed in different quarters. Green and Perse came tumbling down wounded into the boat, which pushed off, while Moter, "seeing this medley," leaped into the sea,

swam out, and, getting hold of the stern was pulled in by Perse.

The savages then fired arrows at the boat, one of which struck Green with such force that he died on the spot, and his body was thrown into the sea. At length the party reached the vessel; but Moter and Wilson died that day, and Perse two days after. Thus perished the chief perpetrators of the late dreadful tragedy, visited by Providence with a fate not less terrible than that which they had inflicted on their victims.

The crew thus deprived of their best hands were in extreme perplexity, obliged to ply the ship to and fro across the straits, and unable without the utmost fear and peril to venture on shore; although it was absolutely necessary for obtaining provisions to carry them to England. They contrived during some anxious and unhappy excursions to collect three hundred birds, which they salted and preserved as the only stock whereupon to attempt the voyage. They suffered during the passage the most dreadful extremities of famine, having only half a fowl a day to each man, and considering it a luxury to have them fried with candles.

Ivet, now the sole survivor of the ringleaders in the late dreadful transaction, sunk under these privations. The last fowl was in the steep-tub and the men were become careless or desperate, when suddenly it pleased God to give them sight of land, which proved to be the north of Ireland. On going ashore at Berehaven they did not meet with much sympathy or kindness; but by mortgaging their vessel they obtained the means of proceeding to Plymouth.

CHAPTER VII.

ARCTIC VOYAGES OF BUTTON, BYLOT, BAFFIN, MUNK, JAMES, AND OTHERS.

NOTWITHSTANDING the deplorable issue of Hudson's last voyage, the discovery thereby made of a great open sea in the west seemed to justify the most flattering hopes of accomplishing a passage, and the next year, 1612, Captain Button was sent out, with Bylot and Pricket as guides. He soon made his way through Hudson's Straits, and pushing directly across the great sea which opened to the westward, came in view of an insular cape, which afterward proved to be the most southern point of Southampton Island. Nothing else broke the apparent continuity of the ocean, and he cherished sanguine hopes that the first coast he should see would be that of Japan. Suddenly the alarm of land was given, when there appeared before him an immense range of Arctic coast, stretching north and south, and barring all farther progress. Button, deeply disappointed, gave it the name of Hope Checked.

Before he had time to look for an opening, the gloom of the northern winter began to gather, and he had to seek quarters for the season, and found them in the same creek and river which afterward became

the principal settlement of the Hudson's Bay Company. In spite of his best precautions he lost several men through the severity of the cold, and was unable to extricate himself from the ice till the middle of June. He then steered northward, and sought an opening through the broad bay between the continent and Southampton Island, since called Roe's Welcome. Seeing this channel, however, become narrower and narrower till it apparently closed, he gave up the attempt, and after touching at several points of the island just named returned to England.

Although Button had been thus baffled by the unwelcome encounter of the western shore of Hudson's Bay, the merchants still considered it by no means ascertained that this coast was so extensive and continuous as to preclude all passage into the ocean beyond America; accordingly they fitted out (in 1614) two vessels under Captain Gibbons, an officer of reputation, pronounced by Button "not short of any man that ever yet he carried to sea." But either his reputation went beyond his merits or fortune was singularly adverse, for never was there a more abortive voyage. He was early entangled in a bay on the coast of Labrador, in which he was detained the whole summer, and which was afterward dignified with the appellation of "Gibbons his Hole." Having here sustained some damage from the ice, he had no sooner extricated himself than he returned home.

The merchant adventurers, still undismayed, sent out next summer (1615) the *Discovery*, under Bylot, who was accompanied by William Baffin, a skillful pilot and the most learned navigator of the age.

Baffin had already made two voyages to the Greenland seas, the first in 1613, with six well-armed ships,

whose object seems to have been to chase away the whaling vessels of other nations. The next year, 1614, he accompanied, as pilot, Robert Fotherby, who was sent out with the ship *Thomasine*, to accompany the great Greenland fleet of ten ships and two pinnaces. While they were fishing, Fotherby and Baffin were to devote themselves mainly to discovery; but their cruise resulted in nothing of interest.

Bylot and Baffin entered Hudson's Straits, and having on the 2d of June heard from the northern shore a great barking of dogs, landed and found five tents covered with seal-skin, among which were running about thirty-five or forty of these animals, of a brindled black color, resembling wolves. They had collars and harness suitable for sledges lined with fish-bone which were standing by. In one of the houses was a bag with little images of men.

The navigators soon descried a canoe with twenty individuals, whom they hailed with Greenland words of courteous import, holding up knives and other toys. Friendly salutations were given in return; but neither party chose to trust themselves within reach of the other. At a little distance, the conflict of opposite currents amid large icebergs caused so fearful a grinding that they gave to the adjoining land the name of Mill Island. There they would have been in extreme danger "had not God, who is stronger than ice or stream," delivered them.

The policy of Bylot in this voyage seems to have been to keep close to the northern shore of the strait; and thus, entering Hudson's Bay at a higher latitude, he hoped to keep clear of those lands which had barred the westerly career of his predecessors. On

reaching, therefore, Hudson's Isles of God's Mercy, instead of steering southward to Cape Dudley Digges, he proceeded directly west, and arrived in the broad expanse afterward called the Fox Channel.

At length he saw land, but it was bounded by a cape which had every appearance of being the most northerly point of America. He called it Cape Comfort; though this name it soon appeared was premature, for a single day had not elapsed when "his sudden comfort was as soon quailed."

They were now on the eastern coast of Southampton Island, which spread on every side its almost measureless extent, seeming to preclude every prospect of an opening on either hand. Disappointment, the lateness of the season, and the pressure of the ice, concurred in persuading Bylot that there was nothing to be hoped for here, and determined him to set sail immediately for England; whither he carried a most unfavorable report as to any prospect of penetrating westward in that direction.

But the adventurers were not discouraged by this adverse result. Turning their hopes to a different quarter, next year (1616) they again fitted out Bylot and Baffin with instructions no longer to attempt the passage by Hudson's Bay, but to enter Davis's Straits, and push due north till they reached lat. 80° , if an open sea should allow them to proceed so far; then, turning to the westward, to round, if practicable, the extreme point of America, and to bear down upon Japan.

Following the course pointed out, Baffin reached, on the 30th of May, Hope Sanderson, the farthest point of Davis's progress, and soon afterward came to a number of small islands on which they found only

females, some of very great age. These at first ran and hid themselves among the rocks; but the sailors having reached two dames, one of whom was estimated at fourscore, and having presented to them bits of iron and the usual toys, the latter carried a favorable report to their youthful country women. The whole party soon came down to the shore, and four even went on board the boat. The charms of these ladies were heightened or disfigured by long black streaks made in their youth with a sharp instrument, and lodged so deep that they could not now be effaced.

The navigators sailed onwards in lat. 74° , when they were arrested by a large body of ice, and obliged to turn into a neighboring sound to wait its melting. Here they received repeated visits from about forty natives, the only account of whom is, that they brought an extraordinary quantity of the bones of sea-unicorns or narwals, great numbers of which were seen swimming in the water. Hence this was called Horn Sound. The mass of ice now dissolved before the powerful influence of the sun, and the discoverers sailed northwards among its fragments; but still, snow fell every day, and the shrouds and sails were often so hard frozen as to make it impossible to handle them.

After having experienced a severe storm, the expedition discovered a sound, which would have supplied them with a multitude of whales had they been provided with the means of capture: this they called Whale Sound. Next, in 78° , appeared another inlet, the widest and greatest in all this sea, and which was named after Sir Thomas Smith, one of the main promoters of discovery. This opening, which Baffin

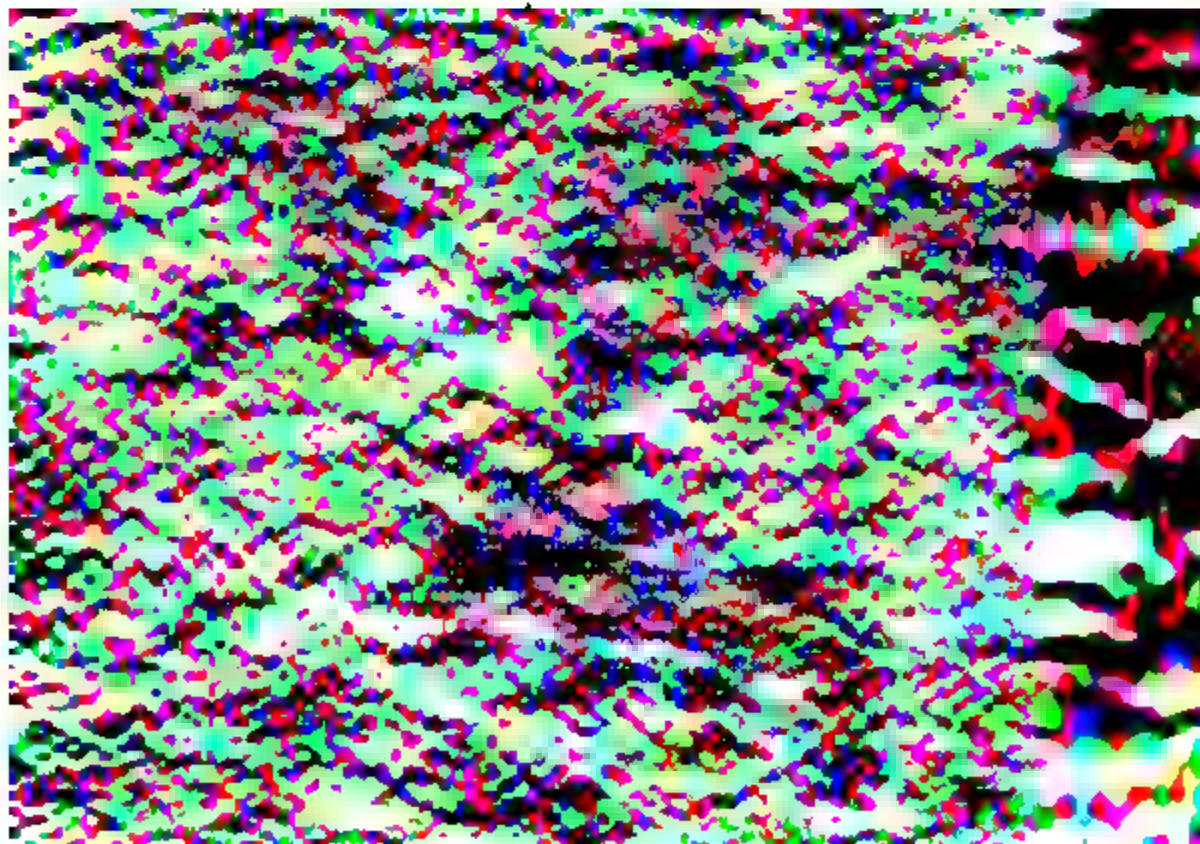
seems to have examined very superficially, abounded almost equally in whales, and caused particular astonishment by the extraordinary variation of the needle, to which nothing similar had ever been witnessed. Between these two sounds was an island which was named Hakluyt, after the venerable recorder of early English discoveries.

Proceeding now along the south-western boundary of this great sea, the next "fair sound" received the name of Alderman Jones, a patron of the enterprise. In lat. 74° , there appeared another broad opening which was called Sir James Lancaster's Sound; but while Baffin calls it great, he seems scarcely to have noticed this future entrance into the Polar Sea; on the contrary, he observes, at the very same moment, that the hope of a passage became every day less and less. He sailed on; but a barrier of ice prevented him from approaching the shore till he came within the "indraft" of Cumberland's Isles, "where hope of passage could be none."

Finding the health of his crew rather declining, he sailed across to Greenland, where an abundance of scurvy-grass boiled in beer quickly restored them; and "the Lord then sent a speedy and good passage homeward."

On returning, Baffin expressed the most decided conviction that the great sea which he had traversed was a bay enclosed on all sides, and affording no opening into any ocean to the westward; and his judgment was received by the public, who named it from him Baffin's Bay. He forcibly, however, represented the great opportunities which it afforded for the whale-fishery, as those huge animals were seen sleeping in vast numbers on the surface of the water,

ARCTIC AURORA.



VIEW ON THE SPITZBERGEN COAST.

without fear of the ship "or of anything else." Baffin was killed near Ormuz in 1621, while engaged in an expedition against the Portuguese.

In 1615, Fotherby who had just returned from a voyage with Baffin, was sent out in the *Richard*, a pinnace of only twenty tons. After many conflicts with ice and fog, he reached Hakluyt's Headland about the beginning of July. He soon began his career of discovery ; but a strong southerly gale driving him upon the ice, shattered his bark considerably, and obliged him to return. As soon as his vessel was refitted, he endeavored by a westerly course to find an opening among the ice, which projected in various points and capes, but was drifted by it far to the southward, where he descried a snowy hill very high amid the clouds ; and the fog lying on each side made it appear like a great continent.

It proved, however, to be only an island—probably Jan Mayen ; and as the shores presented nothing but drift-wood, and appeared as if fortified with castles and bulwarks of rock, no shelter was afforded from a heavy gale which began to blow. This induced him to stand out again to sea. He regained the northern point of Spitzbergen, and began to beat for a Polar passage. The wind, however, blew so strong from the north-north-east that he gave up the attempt, only resolving, on his way home, to take a survey of Hudson's Hold-with-Hope. He came to the place where it ought to have been, but finding no land he insisted that Hudson must have been mistaken in the position assigned to it. Availing himself then of a brisk northerly breeze, he sailed for England.

Fotherby, on being asked as to the prospects of a passage through these seas, replied that though he had

not attained in this respect his desire, nothing yet appeared to exclude hope. There was a spacious sea between Greenland and Spitzbergen, though much incumbered with ice; and he would not dissuade the "worshipful company" from a yearly adventure of £200. The little pinnace, with ten men, in which he had sailed two thousand leagues, appeared to him more convenient for that purpose than any of larger dimensions.

Denmark, which had always felt a natural interest in northern navigation, subsequently made an attempt to follow up the success of Hudson and Baffin. In 1619, Christian IV. sent out two well-appointed vessels under Jens Munk, who had the reputation of a good seaman. He succeeded in penetrating through Hudson's Straits into Hudson's Bay, where he took upon himself to change the whole nomenclature of that region, imposing the names of Christian's Straits and Christian's Sea, and calling the western coast New Denmark. But this innovation, which was contrary to every principle recognized in such cases, has not been confirmed by posterity.

When September arrived, and the ice began to form, Munk established himself in winter quarters at the entrance of Chesterfield Inlet. The season seemed to open with the best promise, commodious huts were constructed, and there were both abundance and variety of game. The Danes saw some brilliant aerial phenomena—at one time three suns in the sky, and the moon environed by a transparent circle, within which was a cross cutting through its centre; but, instead of amusing their minds with these beautiful appearances, they were depressed by viewing them as a mysterious presage of future evils.

Frost now set in with all its intensity; their beer, wine and other liquors were converted into ice; the scurvy began its ravages, and, ignorant of the mode of treating it, they employed no remedy except a large quantity of spirits, which has always been found to aggravate that frightful disorder. Unfit for the exertion necessary to secure the game with which the country abounded, they soon had famine added to their other distresses. Their miseries seem to have been almost without a parallel, even in the dark annals of northern navigation. Munk himself was left four days in his hut without food, and on crawling out, found that of the original crew of fifty-two, only two survived.

The three men now determined to make an effort to preserve life. Gathering strength from despair, they dug into the snow, under which they found herbs and grass, which being of an anti-scorbutic quality soon produced a degree of amendment. Being then able to fish and shoot, they gradually regained their natural vigor. They equipped anew the smaller of the two vessels, in which they reached home on the 25th of September, 1620, after a stormy and perilous voyage.

Munk declared his readiness to sail again; and there are various reports as to the cause why he did not. Some say, that having in a conference with the king, been stung by some expressions which seemed to impute the disasters of the voyage to his mismanagement, he died of a broken heart. But Forster relates, that during several successive years he was employed by the king on the North Sea and in the Elbe, and that he died in 1628, when engaged in a naval expedition.

IN 1631 an English Expedition of two ships commanded by Captains Fox and James, was sent to examine Hudson's Bay. Fox explored the channels on each side of Southampton Island; that on the western side he named Roe's Welcome; the other one he called from his own name, Fox Channel.

Capt. James sailed to the southerly shores of Hudson's Bay, and as winter came on found a harbor in what is now known as James's Bay. Snow soon fell to a great depth, the sails were frozen stiff, and the cables from accumulated ice became as thick as a man's body.

Preparations were now made for a long residence at this place; wood was cut for fuel, and search was made in every direction for traces of human beings, but none were found. A house was erected on shore in which a portion of the crew slept at night, armed with muskets to defend themselves in case of attack. The main-sail was used as a covering for the house. A well was dug, and the men spent much of their time in trapping and hunting foxes and other animals.

In October, six of the men set out with dogs to hunt deer whose tracks had been seen, and returned next day with only one small animal, having passed a miserable night in the woods. Another party which went out was entirely unsuccessful in their hunt, and lost one of their number who was drowned when crossing a frozen pond.

As the cold increased the ship was entirely covered with snow and ice; and it was so beaten about against the ice by the winds and currents that there was great danger of its being destroyed. The captain now proposed to bore holes in the ship and sink it in shallow water, where it might safely remain till spring, when, perhaps, it could be again floated. This was a fear-

PARNELIA.

THE ICE-BOUND HARBOR.

ful expedient ; but after all the provisions and articles needed had been taken on shore, it was adopted ; although the crew, generally never supposed that the ship could be raised again.

They had much confidence in their captain and obeyed all his commands implicitly. "If," said he, "we end our days here, we are as near heaven as in England ; and we are much bound to God Almighty, for having given us so large a time for repentance, and having thus, as it were, daily called upon us to prepare our souls for a better life in heaven. He does not, in the meantime deny that we may use all proper means to save and prolong our lives ; and in my judgment, we are not so far past hope of returning to our native country, but that I see a fair way by which we may effect it.'

Under direction of the carpenter timber was cut, and the building of a large boat was begun, in which they might escape if the ship was destroyed. All worked hard upon it, and the carpenter became so ill and weak that he could scarcely walk and subsequently died. The shoes of the men were all worn out, and they suffered much from cold for many successive months.

During all this season of distress Captain James and his crew never omitted regular devotional services. They particularly solemnized Easter day, the 26th of April 1632 ; and on that day while they were sitting round their fire, the captain proposed to attempt, on the first opening of the warm weather, to clear the ship of ice. This was considered by some of the crew impossible ; because they believed her to be filled with one solid mass of ice. The attempt, however, was resolved upon ; but their only implements for the work were two iron bars and four broken shovels.

The time passed miserably on, till the middle of May, when efforts were made to clear the decks of snow. From this period the vessel began to occupy much of the attention of the captain and his crew. The great cabin was found to be free from ice and water, and a fire was lighted to clear and dry it. One of the anchors, which was supposed to have been lost, was found under the ice and recovered. Soon afterwards they came to a cask, and found it full of good beer; which was a cause of great rejoicing.

They then dug through the ice on the outside of the vessel, and plugged the holes made in scuttling it. The weather grew warmer which thawed the ice in the hold, the water was pumped out, and many barrels of beer and salt beef were found in good condition.

Open water first appeared on the 19th of June; four days after the ship was reloaded, and the sails reset. A cross was then erected on land, and to the top of it were tied pictures of the king and queen. On the 2d day of July, after the captain and his crew had all devoutly paid thanksgiving to the Almighty for their providential deliverance, they weighed anchor, and proceeded on their voyage, and reached England in October.

The Hudson's Bay Company an association of merchants was organized in 1670 under the patronage of Prince Rupert, second cousin of Charles II. Its very favorable charter conferred on them the right to the exclusive trade of the region, and territorial possession of the vast domain. It imposed on the Company the duty of making strenuous exertions for the discovery of a western passage; but its officers paid little attention to the subject till 1719 when they fit-

ted out an expedition under Knight and Barlow. These officers never returned, and a vessel sent next year under Captain Scroggs could learn no tidings of them. Nor was it till nearly fifty years afterward that the wrecks of their armament were found on Marble Island, where they had been cast ashore.

In 1741, Captain Middleton obtained the command of two vessels, with which he examined Wager Inlet, and then sailed up Roe's Welcome—a channel lying west of Southampton Island—to its northern extremity. Here he found a spacious opening, which gave him at first great hopes of success; but finding it shut in by land, he named it Repulse Bay. He then followed the coast in an easterly direction till he came to a channel, which, from the accumulation of ice at its entrance, he called the Frozen Strait. He returned home, expressing a decided conviction that no practicable passage existed in that direction.

Mr. Dobbs, the mover of the expedition, was deeply disappointed by this result; and from his own reflections, and the statement of several of the inferior officers, became satisfied that Middleton had given a very false and imperfect statement of the facts; though such was not the case. £10,000 was subscribed for a new expedition, and a standing offer of a reward of £20,000 to the discoverers of a North-west passage was made by the English government.

Captains Moor and Smith commanded this new expedition, which sailed in 1746; like many others equipped with peculiar pomp and circumstance, it entirely failed. They merely ascertained, what was pretty well known before, that the Wager Inlet afforded no passage; and after spending a severe winter there, returned to England.

In 1770, Samuel Herne, an officer of the Hudson's Bay Company, descended to the mouth of the Coppermine River, and thus opened the way for subsequent explorers. His journal of the trip lay for many years in a "pigeon-hole" at the head-quarters of the company. When the fortunes of war found the French Admiral La Perouse the captor of Fort York, he there found Herne's journal, read it, and was so pleased with it that he told the officer that if he would pledge his honor that it should be published, he might have back his fort and all that pertained to it. The offer was accepted, the French retired, and thus it came about that Herne's record was put in print.

In June, 1773, an expedition under Captain John Phipps (afterward known as Lord Mulgrave) consisting of two bomb-vessels—the "Racehorse" and the "Carcass"—sailed from England to search for the North Pole. The Carcass was commanded by Lieut. Lutwidge, under whom Horatio Nelson, afterward the naval hero of England, served as cockswain. The route was up the Greenland Sea, and the highest latitude reached was $80^{\circ} 48'$, and the most easterly point was near the Seven Islands to the north of Spitzbergen in longitude 20° . To the north and north-east was a solid pack of ice covered with snow. Here the ships were becalmed and frozen in amid a beautiful and picturesque scene; but as the crew were starting over the ice to attempt to reach the Dutch whaling-ships, the ice opened and the ships escaped to the south and reached England in September.

In 1776, Captain Cook sailed from England on his last voyage, and in 1778 passed up Bering's Strait, expecting to proceed along the coast of America to Baffin's Bay, where a vessel was sent to meet him.

But he was unable to penetrate further than Icy Cape on account of the ice, and after examining the coasts on both sides of the strait, he went to the Sandwich Islands, where he was killed in an affray with the natives.

In 1789, Alexander Mackenzie reached the mouth of the great river which bears his name, and looked out on the Arctic Sea. In a second journey he crossed the Rocky Mountains, and followed Frazer River to its mouth at the Georgian Gulf, opposite Vancouver's Island, where he arrived in July, 1792.

CHAPTER VIII.

THE ARCTIC WHALE-FISHERY.

THE Arctic seas are the native regions of the true whale, and he never leaves them. Man, ever searching for objects of use and profit, early discovered in these huge creatures a variety of substances fitted for the supply of important wants. No sooner, therefore, had the course of discovery opened a way into the seas of the north, than daring fishermen ventured thither and commenced a branch of commerce which has proved of great importance to the world, but which is more full of adventure and peril, than any other occupation in which man engages for a livelihood.

As early as the ninth century, whales were captured on the Norway coast; but they were then valued chiefly for their flesh, which satisfied the hunger and even gratified the tastes of primitive man—whale's tongues being counted among the luxuries of the middle ages. In later years, when civilization rejected the flesh of the whale as an article of food, the oil was needed to supply the winter lamp, and for other purposes; while the firm, flexible, elastic bone was found to be peculiarly adapted for various articles of dress, ornament, and common use.

The English were the first who pushed whaling

operations into the high latitudes of the Arctic seas. The discovery of Spitzbergen, by Barentz, was followed by the voyage of Stephen Bennet, who re-discovered Bear Island and named it Cherie Island. A series of voyages for the capture of walrus ensued, in which Bennet, Jonas Poole, and others took a part; but the attention of these hardy walrus-hunters was soon attracted to a game more worthy of their steel.

The voyages of Hudson led the way to a great and flourishing whaling trade, in which many nations competed for pre-eminence, and which opened one of the most interesting chapters in the history of English and Dutch commercial enterprise. Henceforth, for more than two centuries, that part of the frontier of the unexplored region which extends from Spitzbergen to Greenland, was annually frequented by fleets of whalers.

Hudson, on returning from his Polar voyage, reported having seen large numbers of whales along the coast of Spitzbergen; and in 1611, the Muscovy Company sent out the "Mary Margaret" with everything then considered requisite for catching whales. Captain Edge, her commander, succeeded in taking one small whale, which yielded twelve tons of oil—the first, he believed, that was ever extracted in the Greenland seas. Soon afterward the Mary Margaret was wrecked, and her crew in three boats were found at Spitzbergen by Captain Poole, of the Elizabeth, a craft of fifty tons. Poole caught so many walrus on this trip, that their hides caused the destruction of his vessel, for they shifted in the hold and capsized her. Poole and his crew escaped, and were taken home by Captain Marmaduke.

Notwithstanding the unfortunate termination of

their first whaling venture, the Muscovy Company sent out two ships under Poole the next season to follow up the undertaking. Meantime the Dutch, intent on every form of commercial adventure, had sent vessels to the Greenland seas for the same purpose. These the Englishmen considered as interlopers; and being the strongest party they compelled their rivals to leave. Next year the same company obtained a royal charter, prohibiting all besides themselves to intermeddle in any shape with this valuable branch of industry. To make good this privilege, the company fitted out an expedition of seven well-armed ships, under command of William Baffin, who, on reaching the seas round Spitzbergen, found them filled with ships of different nations, Dutch, French, and Spanish. All were compelled to depart, or to fish under the condition of delivering half of the proceeds to the English as the lords of the northern seas.

This interference with the whaling vessels of other nations, was denounced as a flagrant example of the tyranny of the new mistress of the ocean; and the Dutch determined not to submit, but to repel force by force. For this purpose, they sent out fleets so numerous and so well-armed, that for some years there was but slight interference with their rights. At length, in 1618, a general encounter took place, which resulted disastrously to the English, for one of their ships was taken and carried to Amsterdam. The Dutch government, anxious for peace, rewarded the captors but restored the vessel. This led to a compromise, and at last to a division of the Spitzbergen whaling-grounds among the nations whose ships had been accustomed to resort there. There was plenty

of room for all; but business did not prove profitable to the English owners; the gains of their fishery were absorbed by losses; and, eventually, for many years, scarcely an English ship sailed northward.

But during the time that English mariners were in the ascendant in the Spitzbergen waters, from the voyage of stout Henry Hudson in 1607 to about 1622, they did excellent geographical work. Greenland was the name applied in those days to the Spitzbergen Archipelago. In 1613 and 1614 they discovered Hope Island, and other islands to the south-eastward of Spitzbergen. In 1616 Captain Edge, one of the leading spirits in the early whaling enterprises, sent a pinnace to the eastward, to explore Edge Island, and other land on the east side, as far as 78° north. This pinnace was a boat of twenty tons, with a crew of twelve men. She is portrayed on the curious old chart of Spitzbergen in "Purchas's Pilgrimes," pulling up Stor Fiord. The pinnace's crew killed a thousand sea-horses on Edge Island, and got 1,300 tons (barrels?) of oil. In 1613, the Dutch followed the example, and the Dutch and English seamen often came to blows over the exclusive right of the fishery. One of the English expeditions of this period discovered a large island to the eastward of Spitzbergen, which was never visited again until three Norwegian sealing vessels reached it in 1872. This discovery is thus recorded in Purchas:—

"In the yeare 1617 the Company set out for Greenland fourteene sayle of ships, and their two pinnasses, furnished with a sufficient number of men and all other provisions fitting for the voyage, under the command of Thomas Edge. . . . They employed a ship of sixtie tunnes, with twenty men in her, who discovered



ANCIENT MAP OF SPITZBERGEN—FROM "PURCHAS HIS PILGRIMS."

to the eastward of Greenland, as far to the northwards as seventie-nine degrees, an iland which he named Wiches Iland, and divers other ilands as by the map appeareth, and killed store of sea-horses there, and then came into Bel Sound, where he found his lading of oyle left by the captayne, which he tooke in. This yeare the Hull men set a small ship or two to the eastwards of Greenland, for the Hull men still followed the steps of the Londoners, and in a yeare or two called it their discoverie, which is false, and untrue, as by oath in the Admiraltie doth appeare. The Dutch likewise practice the same course."

The Dutch whale-fisheries, unlike those of the English, became the source of great national wealth. An immense capital was invested in the business, and it was carried on with characteristic prudence, diligence, and consequent success. A settlement was founded at the Smeerenberg Bay at the north-west corner of Spitzbergen, where the requisite apparatus for extracting oil and bone was erected on an immense scale. During the summer, Smeerenberg was a crowded and populous village, and in this dreary corner of the world were to be found many of the luxuries of civilized life.

But a change came over Smeerenberg. Gradually and at last almost entirely the whales deserted its bay and sought refuge in distant waters. Thither their pursuers followed them, and at last, finding the expense and delay of conveying their prizes to Smeerenberg too onerous, they contrived an arrangement by which the whale, being fastened to the sides of the ship, was cleared of its blubber and bone. Smeerenberg then lost every foundation on which its prosperity had rested. The furnaces, tanks and other

articles were carried away, and it is now difficult to trace the spot on which stood that once flourishing village, in whose bay there had sometimes been as many as two hundred vessels.

In 1633, the Dutch planned another settlement further to the north, and seven sailors volunteered for this arduous undertaking. On the 30th of August the fleet left them in North Bay, where they not only undertook to live during the winter, but even to provide themselves with fresh provisions. They visited all the surrounding shores, took three reindeer and a number of sea-swallows, collecting also a great quantity of a species of watercress. Their great ambition was to catch a whale; but, though tantalized by the sight of many, all their attempts failed.

Severe cold began to be felt in October, and on the 15th, only a small portion of the sun's disk could be seen above the horizon, and in a few days it entirely disappeared; there was still a faint twilight of eight hours, which was soon reduced to five, and became every day shorter and shorter. In November, the cold increased to the utmost pitch; they could not sleep in their beds, but were obliged either to crouch over the fire, or run full speed through the hut, to keep up the vital energy. At length they ranged all their couches round the fire-place and a stove, yet still found it necessary to lay themselves down between the stove and the fire, holding their feet to the very embers.

Night and winter continued in their utmost intensity till the 22d of January, when they again enjoyed a twilight of six hours; at midday of the 26th, there was no longer a star to be seen; but it was on the 22d of February ere, from a mountain-top, they could

descry any portion of the sun's disk. Throughout the whole period they had dreadful contests with the Polar bear.

Thus these seven persons passed through this hard winter without any severe attack of scurvy; and on the 27th of May they were overjoyed by the view of a boat, which conveyed them to a neighboring bay, where seven Dutch ships had assembled for the fishery.

The success of this experiment induced the Dutch Company to repeat the attempt in the following year, when seven other sailors, well furnished with victuals, and apparently with every means of withstanding the rigor of the climate, undertook to winter in Spitzbergen. They appear, however, to have been of a less active disposition than their predecessors, and failed in every attempt to procure fresh victuals. The sun having quitted them on the 20th of October, they shut themselves up in their hut, out of which they scarcely ever stirred. In a few weeks they were attacked by scurvy under its most malignant form, which, amid this recluse life, and in the absence of fresh meat and vegetables, assumed continually a more alarming type, till three died, whose bodies the others with difficulty enclosed in coffins. The survivors killed a dog and a fox, which afforded some relief, but not enough to arrest the progress of the malady. The bears began to approach the hut, and would have been a blessing, had the men retained strength either to shoot the animals or to drag home the carcass. The sun appeared on the 24th of February; but they could no longer derive aid from this benignant luminary. The last entry in their journal is in the following terms:—

"We are all four stretched on our beds, and are

still alive, and would eat willingly, if any one of us were able to rise and light a fire. We implore the Almighty, with folded hands, to deliver us from this life, which it is impossible to prolong without food or any thing to warm our frozen limbs. None of us can help the other, each must support his own misery."

Early in spring the fishing vessels arrived, and a party hastened to the hut. They found it so fast closed, that an entrance could only be effected by opening the roof. They found it a tomb. Three of the men were enclosed in the coffins which had been framed for them; the other four lay dead, two in their beds, and two on a piece of sail spread on the floor. These last had perished in consequence of mere inability to make the effort necessary for lifting and dressing the food.

About the same time the Dutch made an attempt to establish a colony on Jan Mayen Island, but with a result equally fatal. The journal of the unfortunate seamen contains little except a register of the weather.

The next instance of wintering in Spitzbergen arose from necessity and disaster. A Russian vessel which had sailed from Archangel for the whale-fishery in 1743, being driven by the wind to the eastern coast of Spitzbergen, found itself beset amid floating ice without hope of deliverance. One of the party recollected that a hut had been erected on this coast by some of his countrymen, under the apprehension of being obliged to spend the winter there. He and three others set out to discover the place. With much difficulty they reached the shore, leaping from fragment to fragment of moving ice; then, spreading themselves in different directions, they found the cottage, which, though ruinous, afforded shelter for the night.

Early in the morning they hastened to the shore, to convey to their comrades this happy intelligence. But what must have been their horror, when they saw only a vast open sea, without a vestige of the ship, or even of the numerous icebergs which had been tossing through the waves! A violent gale had dispersed them all, and apparently also sunk the vessel, which was never heard of more.

These four unfortunate seamen, abandoned on this dreadful shore, having the long winter to pass without food, or arms and implements to procure any, did not, however, give way to despair. They had a gun with which they shot twelve deer; then their ammunition failed; but some pieces of iron were found on the shore, which they contrived to fashion into pikes. At the moment when their stock of venison was nearly exhausted, they found occasion to employ these weapons against a Polar bear by which they were assailed. The animal, being vanquished and killed after a formidable struggle, supplied for the present all their wants. His flesh was food, his skin clothing, his entrails, duly prepared, furnished the string which alone had been wanting to complete a bow. With that instrument they were more than a match for the reindeer and the Arctic fox, with the spoils of which they filled both their pantry and their wardrobe; and thenceforth they avoided, unless in cases of necessity, the encounter of the bear. Being destitute of cooking utensils, they were obliged to devour the food nearly raw—dried either by suspension in the smoke during the long winter, or by exposure to the heat of the sun during the short summer. Yet this regular supply of fresh meat, and, above all, the constant exercise to which neces-

sity prompted, enabled them to preserve their health entire during six years, in which they looked in vain for deliverance. In this time they killed ten bears, two hundred and fifty reindeer, and a multitude of foxes.

At the end of the six years one of the men died, when the three survivors sunk into despondence, giving up all hopes of relief, and looking forward to the moment when the last of them would become the prey of the bears. Suddenly, on the 15th of August, 1749, they descried a vessel at sea. They lighted fires on the heights, hoisted a flag formed of reindeer skins, and were at length discovered by the ship, which proved to belong to their native country.

The example thus involuntarily set by these Russian sailors has been followed, to a considerable extent, by their countrymen, some of whom have since regularly wintered in huts on the Spitzbergen coast, and employed themselves in chasing the walrus and seal along the shore, the deer and Arctic fox in the interior. They are constantly engaged in hunting, unless when interrupted by tempest; and, even when the hut is blocked up with snow, they find their way out by the chimney.

Commodore Jansen, of the Dutch Navy, makes the following interesting remarks on the Spitzbergen fishery of his countrymen:—"When our whalers first came to Spitzbergen, they met with the whales in great quantities, enjoying all the luxury of this most exquisite feeding-ground, the best perhaps in the whole Arctic region. The whales were found sporting in open water off shore, with their huge backs above water, or taking their *siesta* in a calm bay, surrounded by abundance of food. This was a most

glorious time for whales—the paradise of their history. In spite of the yearly increase of whalers, and the great number of whales that were killed on the same spot, they always resorted to this favorite ground.

“During this first period, called the ‘Shore Fishery,’ we had an oil-boiling establishment at Smeerenburg, on Amsterdam Island. Every year our whalers went straight to this island; each vessel had six or seven boats, and a large complement of men, who were employed in killing whales, bringing them ashore, and making oil as fast as possible. Thousands and thousands of whales were killed, and at last, from about 1640–50, they ceased for a time to come at all to the west coast of Spitzbergen. As soon as the scarcity of whales was felt, the directors of the Dutch Whaling Company made great efforts to follow them to their place of retreat. Several ships were sent out on exploring expeditions, but they did not find any islands besides those round Spitzbergen, nor any whaling-ground as easy and profitable as Smeerenburg and its vicinity had been.”

The year 1777 was one which exhibited, on a large scale, all the vicissitudes of this occupation. Captain Broerties, in the *Guillamine*, arrived that year on the 22d of June at the great bank of northern ice, where he found fifty vessels moored and busied in the fishery. The day after, a tempest drove in the ice with such violence that twenty-seven of the ships were beset, of which ten were lost. The *Guillamine* with four other ships, succeeded in reaching a narrow basin, enclosed by icy barriers on every side.

On the 1st of August the ice began to gather thick, and a violent storm driving it against the vessels, placed them in great peril for a number of days. On

the 20th, a dreadful gale arose from the north-east, in which the *Guillamine* suffered considerable damage. In this awful tempest, out of the five ships two went down, a third sprung a leak, and their crews were taken on board of the two remaining barks.

On the 25th these were completely frozen in, and it was resolved to send a party of twelve men to seek aid from four vessels which a few days before had been driven into a station at a little distance; but by the time of their arrival, two of these had been dashed to pieces, and the others were in the most deplorable condition.

Meantime the *Guillamine* and her companions drifted in sight of Gale Hamkes' Land, in Greenland, and the tempest still pushing them gradually to the southward, Iceland at length appeared on their left. The crews were beginning to hope that they might reach a harbor, when, on the 13th of September, a whole mountain of ice fell upon the *Guillamine*. The men, half naked, leaped out upon the frozen surface, saving with difficulty a small portion of their provisions. The broken remnants of the vessel were soon buried under enormous piles of ice. By leaping from one fragment of ice to another, the men contrived to reach the other vessel, which, though in extreme distress, received them on board. Shattered and overcrowded, she was obliged immediately after to accommodate fifty other seamen, the crew of another vessel which had just gone down, the chief harpooner and twelve of the mariners having perished. These numerous companies, squeezed into one crazy bark, suffered every kind of distress, and famine, in its most direful forms, began to stare them in the face.

All remoter fears, however, gave way, when in October, the vessel went to pieces in the same sudden manner as the others, leaving to the unfortunate sailors scarcely time enough to leap upon the ice with their remaining stores. With great difficulty they reached a field of some extent, and contrived with their torn sails to rear a sort of covering; but, sensible that, by remaining on this desolate spot, they must certainly perish, they saw no safety except in scrambling over the frozen surface to the coast of Greenland, which was in view. With infinite toil they effected their object, and happily met some inhabitants who received them hospitably, and regaled them with dried fish and seals' flesh. Thence they pushed across that dreary region, treated sometimes well, sometimes churlishly; but by one means or other they succeeded at length, on the 13th of March, in reaching the Danish settlement of Frederikshaab, where they were received with the utmost kindness.

The whaling trade of the Hollanders gradually came to an end in the last half of the last century. Many names round the Spitzbergen shores, and large numbers of graves, remain as memorials of their former hardihood.

CHAPTER IX.

THE ARCTIC WHALE-FISHERY.

(CONTINUED.)

IN 1719 the Dutch opened a whale-fishery in Davis' Strait, which proved very remunerative and comparatively safe; for, in a period of sixty years, out of over three thousand ships fishing there, only sixty-two were wrecked. English whalers soon began to frequent the same fishery; but in spite of old William Baffin's judicial advice, no vessel ever followed in his track until 1817, and the whales were permitted to remain for two centuries in tranquil enjoyment of the North Water of Baffin's Bay. Baffin had gallantly led the way thither and no man had dared to follow him. At last two English whalers successfully passed the middle pack, and found whales so plenty that from that day to this, very few years have passed during which whalers have not forced that barrier.

Melville Bay used to be a place of dread and anxiety for the whaling fleet; for when a southerly wind brought the drifting pack in violent and irresistible contact with the land-floe, the ships, slowly creeping along its edge, were frequently crushed like so many walnuts. In 1819, as many as fourteen ships were

smashed to pieces in this way; in 1821, eleven; and in 1822, seven.

The year 1830 was the great season of disaster for the whalers, for nineteen ships were entirely destroyed, occasioning immense loss. On the 19th of June, a fresh gale from the south-west drove masses of ice into Melville Bay, and nipped the whole fleet against the land-floe, about forty miles to the southward of Cape York. In the evening the gale increased, and the floes began to overlap each other. A huge floe then came down upon the devoted ships, and a scene of indescribable horror ensued. In a quarter of an hour several fine ships were converted into shattered fragments; the ice, with a loud grinding noise, tore open their sides, masts were seen falling in all directions, great ships were squeezed flat and thrown broadside on to the ice, and one whaler, the "Rattler," was literally turned inside out. The shipwrecked sailors only just had time to jump on the ice, and take refuge on board their more fortunate consorts—for even in 1830 several ships escaped by digging deep docks in the land ice. It must be understood that there is little danger of loss of life in Melville Bay, for even if a solitary whaler is destroyed, when no other is in sight, the retreat in boats to the Danish settlements is generally practicable and easy. When the fearful catastrophe occurred in 1830, there were a thousand men encamped on the ice, the clusters of tents were a scene of joyous dancing and frolic, for Jack had got a holiday, and the season was long remembered as "Baffin's Fair."

The whale-fishery has been carried on from the United States with greater vigor and success than

from any other country, and from an early period. In the middle of the eighteenth century, the business was a very lucrative one; and several flourishing towns were built up thereby. At the commencement of the Revolutionary War, Massachusetts alone had nearly two hundred vessels engaged in the northern seas, besides many in the southern. The great English Statesman, Burke, in 1774 paid the following tribute to Yankee enterprise:—

“Look at the manner in which the New England people carry on the whale-fishery. While we follow them among the tumbling mountains of ice and behold them penetrating into the deepest frozen recesses of Hudson’s Bay and Davis Strait; while we are looking for them beneath the Arctic circle, we hear that they have pierced into the opposite region of polar cold; that they are at the antipodes, and engaged under the frozen serpent of the South. Falkland Island, which seemed too remote and too romantic an object for the grasp of national ambition, is but a stage and resting-place for their victorious industry. Nor is the equinoctial heat more discouraging to them than the accumulated winter of both the Poles. We learn that while some of them draw the line or strike the harpoon on the coast of Africa, others run the longitude and pursue their gigantic game along the coast of Brazil.”

The war put a temporary stop to the whaling business of the United States, but it was renewed with energy as soon as peace was declared, and again broken up by the war of 1812. Its recovery was, however, rapid. In 1844, the American whaling fleet comprised six hundred and fifty vessels, manned by over seventeen thousand men, while the English

fleet at the same date numbered only eighty-five vessels. In 1849, the American whaling fleet was nearly as large as in 1844. The Northern Pacific, extending from the coast of America to Kamchatka, was at that time the great harvest field of American whalers, and Bering Strait, and the Arctic Ocean to which it leads have since been visited by intrepid American whalers.

Owing to the scarcity of whales, the use of gas, and the discovery of petroleum, the whaling business of the United States has dwindled down to very small proportions compared with what it once was. Dangers, disasters, and sufferings are, however, still incident to the profession. In 1871, the North-west whaling fleet was shut in by the ice, and many of the ships had to be abandoned. Quite recently three New Bedford whalers have been lost in Hudson's Bay, and another which has just returned was imprisoned thirteen months amid the desolations of Repulse Bay.

Although never wholly abandoned, the whaling trade of Great Britain fluctuated for many years; until it was found that an Indian fibre, when manipulated with whale oil, could be manufactured into a great variety of useful fabrics. The extension of the manufacture of jute in Dundee, Scotland, caused the revival of the whale-fishery in Baffin's Bay. A million bales of jute are now annually imported into Dundee, equal to one hundred and forty-three thousand tons; and the bulk of the whale oil is required by the jute manufacturers of Dundee and the neighborhood. Thus the port of Dundee has now become the centre of the English whale-fishing trade; and cargoes of oil from the Arctic regions may be seen dis-

charging alongside of cargoes of jute from Calcutta, both being essential to the prosperity of the port. Of late years steam has made a great change in navigation, and the steam whalers are not exposed to the same risks and detentions as fall to the lot of sailing ships. The first steam whaler sailed from Dundee in 1858, and now a whaling fleet of ten steamers leaves every spring for Baffin's Bay and returns in the fall. Each carries eight whale boats, manned by nearly the whole crew of sixty men; for few remain on the ship when the cry of "There she spouts!" is heard.

It was a steamer of this line, the Ravenscraig, which rescued the crew of the wrecked *Polaris*, and the party were carried to Dundee in two others, the *Intrepid* and the *Arctic*. The latter steamer had, during her trip, penetrated into the Gulf of Boothia.

CHAPTER X.
CRUISE OF THE ISABELLA AND ALEX-
ANDER.

(JOHN ROSS—PARRY.)

THE Northern seas, as a theatre of adventure, had been unoccupied for half a century, and the grand question in which England had taken so deep an interest was still open. For several years preceding 1818, vast masses of ice had floated down from the regions of Baffin's Bay, and an unusual opportunity of discovering a North-west passage to the Pacific Ocean, seemed to present itself.

In that year the English government fitted out two expeditions; one to search for the North-west passage, the other to attempt a voyage across the Pole. The first consisted of the *Isabella* of 385 tons, commanded by Captain John Ross, an officer of reputation and experience, who had twice wintered in the Baltic, had been employed in surveying the White Sea, and been as far north as Bear Island; and the *Alexander* of 252 tons, commanded by Lieutenant Wm. E. Parry, afterwards famous as an Arctic explorer.

On the 18th of April the vessels left the Thames, and on the 27th of May came in view of Cape Farewell, round which as usual were floating numerous and lofty icebergs of the most varied forms and tints.

On the 14th of June they reached the Whale Islands, where they were informed by the governor of the Danish settlement, that the past winter had been uncommonly severe—the neighboring bays and straits having been all frozen two months earlier than usual—and that some of the channels northward of his station were still bound in with ice.

On the 17th of June, an impenetrable barrier of ice stopping their course, they fastened to an iceberg having forty-five whale-ships in company. At length the ice attached to the eastern shore broke up, though still forming a continuous rampart at some distance to the westward, but in the intermediate space they were enabled to move forward slowly along the coast, laboring through narrow and intricate channels amid mountains and loose fragments of ice near the Danish settlement. Their detention had not lacked amusement; the half-caste sons and daughters of Danes and Esquimaux danced Scotch reels with the sailors on the deck of the *Isabella*; Jack Saccheous, a native of Greenland, who accompanied the expedition as interpreter, was master of ceremonies.

A daughter of the Danish resident, about eighteen years of age, and by far the best looking of the group, was the object of Jack's particular attentions; which being observed by one of the officers, he gave him a lady's shawl, ornamented with spangles, as an offering for her acceptance. He presented it to the damsel, who bashfully took a pewter ring from her finger and presented it to him in return.

Proceeding along a high mountainous coast, the expedition came to a tribe of Esquimaux who seemed to exist in a state of the deepest seclusion. They had never before seen men belonging to the civilized



KAYAK AND OOMIAK



WHALES STOPPED BY THE PACK.

AN ICE CATHEDRAL.

world, or of a race different from their own. The first small party whom the navigators approached showed every sign of the deepest alarm; dreading, as was afterward understood, a fatal influence from the mere touch of these beings of an unknown species. Yet they seem to have felt a secret attraction towards the strangers, and advanced, holding fast the long knives lodged in their boots, and looking significantly at each other.

Having come to a chasm which separated them from the English, they made earnest signs that only the interpreter, who bore a resemblance to themselves, should come across. He went forward and offered his hand. They shrunk back for some time in alarm; at length the boldest touched it, and finding it flesh and blood set up a loud shout, which three others joined. The rest of the party then came up, to the number of eight, with fifty dogs which helped their masters in raising a tremendous clamor.

Ross and Parry now thought it time to come forward. This movement excited alarm and a tendency to retreat; but Saccheous having taught these officers to pull their noses, this sign of amity was graciously accepted. A mirror was now held up to them, and on seeing their faces in it they showed the greatest astonishment; they looked around on each other a few moments in silence, then set up a general shout, succeeded by a loud laugh of delight and surprise.

The ship was the next object of their speculation. They began by endeavoring to ascertain its nature by interrogating it, for they conceived it to be a huge bird, spreading its vast wings and endowed with reason. One of them, pulling his nose with the utmost solemnity, began an address :

“Who are you? Whence come you? Is it from the sun or the moon?”

The ship remaining silent, they at length applied to Saccheous, who assured them that it was a frame of timber, the work of human art. To them, however, who had never seen any wood but slight twigs and stunted heath, its immense planks and masts were objects of amazement. What animal, they also asked, could furnish those enormous *skins* which were spread for the sails.

• Their admiration was soon followed by a desire to possess some of the objects which met their eyes, but with little discrimination as to the means of effecting their end. They attempted first a spare topmast, then an anchor; and these proving too ponderous, one of them tried the smith's anvil; but finding it fixed, made off with the large hammer. Another wonder for them was to see the sailors mounting to the topmast; nor was it without much hesitation that they ventured their own feet in the shrouds. A little terrier dog appeared to them a contemptible object, wholly unfit for drawing burdens or being yoked in a sledge, while the grunt of a hog filled them with alarm.

These Esquimaux had a king who ruled seemingly with gentle sway; for they described him as strong, very good and very much beloved. The discoverers did not visit the court of this Arctic potentate; but they understood that he drew a tribute, consisting of train-oil, seal-skins, and the bone of the unicorn. Like other Greenlanders, they had sledges drawn by large and powerful teams of dogs. They rejected with horror biscuit, sweetmeats and spirits; train-oil, as it streamed from the seal and the unicorn, alone gratified their palate. Captain Ross, swayed by national

CAPE ISABELLA

CAPE ALEXANDER.

impressions, gave to this tribe the name of *Arctic Highlanders*. In the northern part of this coast the navigators observed a remarkable phenomenon,—a range of cliffs, the snowy covering of which had exchanged its native white for a tint of dark crimson. The latest observations have established its vegetable origin.

Having now passed Cape Dudley Digges, Captain Ross found himself among those spacious sounds which Baffin had named but so imperfectly described. He seems, however, to have followed the same hasty method. He sailed past Wolstenholme and Whale Sounds without even approaching their entrance, concluding them to be blocked up with ice, and to afford no hope of a passage. Ross next came to Smith's Sound, which Baffin had described as the most spacious and promising of the whole circuit of these coasts. It was viewed with greater attention; but believed to be completely enclosed by land. The two capes at its entrance were named after the ships *Isabella* and *Alexander*. He then came to a spacious bay, which had hitherto been unknown and unobserved, and afterward to that which Baffin had called Jones's Sound; but in respect to both was led to a prompt and unfavorable conclusion.

On the 30th of August, the expedition came to a most magnificent inlet, bordered by lofty mountains of peculiar grandeur, while the water being clear and free from ice, presented so tempting an appearance that it was impossible to refrain from entering. This channel, which soon proved to be the Lancaster Sound of Baffin, was ascended for thirty miles; during which run, officers and men crowded the topmast filled with enthusiastic hope, and judging that it af-

forded much fairer hopes of success than any of those so hastily passed. Captain Ross however, and those whom he consulted, never showed any sanguine expectations. He soon thought that he discovered a high ridge stretching directly across the inlet; and though a great part of it was deeply involved in mist, yet a passage in this direction was judged to be hopeless. The sea being open, the ship proceeded; but an officer came down from the crow's nest, stating that he had seen the land stretching very nearly across the entire bay. Hereupon it is said, all hopes were renounced even by the most sanguine, and Captain Ross sailed onward merely for the purpose of making some magnetical observations.

At three o'clock, the sky having cleared, the commander himself went on deck, when he states that he distinctly saw across the bottom of the bay a chain of mountains continuous and connected with those which formed its opposite shores. The weather then becoming unsettled, he made the signal to steer the vessels out of Lancaster Sound. Lieutenant Parry, however, declares that to him, in the *Isabella*, this signal appeared altogether mysterious, being himself full of the most sanguine expectations, and seeing no ground for this abrupt retreat; but his duty obliged him to follow.

On regaining the entrance of this great channel, Captain Ross continued to steer southward along the western shore of Baffin's Bay and Davis's Strait, without seeing any entrance which afforded equal promise, and returned home early in October.

Ross arrived in England under decided conviction that Baffin's observations had been perfectly correct, and that Lancaster Sound was a bay.

CHAPTER XI.

CRUISE OF THE HECLA AND GRIPER.

(PARRY AND LIDDON.)

It being determined that a new expedition should be fitted out and intrusted to Lieutenant Parry, that he might fulfill, if possible, his own sanguine hopes and those of his employers, he was furnished with the Hecla of 375 tons, and a crew of fifty-eight men; and with the Griper gun-brig of 180 tons and thirty-six men, commanded by Lieutenant Liddon. These ships were made as strong and as well-fitted as possible for the navigation of the Arctic seas; and were stored with ample provisions for two years, a copious supply of antiscorbutics, and every thing which could enable the crews to endure the extreme rigors of a Polar winter.

Lieutenant Parry, destined to outstrip all his predecessors in the career of Arctic discovery, left the Nore on the 11th of May, 1819, and on the 15th of June came in view of the lofty cliffs of Cape Farewell. On the 18th the ships first fell in with icebergs, and made an effort to push through the icy masses in the direction of Lancaster Sound; but these suddenly closed upon him, and on the 25th the two ships were immovably beset; but on the second day the ice was loosened and driven against them with much violence.

Resigning the idea of reaching Lancaster Sound by the most direct route, the explorers coasted northward along the border of this great icy field in search of open water, and proceeded, till they reached latitude 75° . As every step was now likely to carry them farther from their destination, Parry determined upon a desperate push to the westward; and by sawing and warping, finally penetrated the icy barrier and saw the western shore clear of ice extending before them.

The navigators now bore directly down upon Lancaster Sound, and on the 30th of July found themselves at its entrance. They felt an extraordinary emotion as they recognized this magnificent channel, with the lofty cliffs by which it was guarded, aware that a very short time would decide the fate of their grand undertaking. They were tantalized, however, by a fresh breeze coming directly down the sound, which suffered them to make only very slow progress. There was no appearance, of any obstructions either from ice or land, and even the heavy swell which came down the inlet, driving the water repeatedly in at the stern-windows, was hailed as an indication of open sea to the westward.

On the 3d of August an easterly breeze sprung up, carrying both vessels rapidly forward. A crowd of sail was set, and they pushed triumphantly to the westward. Their minds were filled with anxious hope and suspense. The mast-heads were crowded with officers and men, and the successive reports brought down from the topmast pinnacle were eagerly listened to. They passed various headlands with several wide openings towards the north and south, but these it was not their present object to explore. The wind,

freshening more and more carried them happily forward, till at midnight they found themselves a hundred and fifty miles from the mouth of the grand inlet, which still retained a breadth of fifty miles. The success of the expedition they hoped was now to a great extent decided.

The ships proceeded on and found two other inlets, then a bold cape named Fellfoot, forming apparently the termination of this long line of coast. The lengthened swell which still rolled in from the north and west, with the oceanic color of the waters, inspired the hope that they had already passed the region of straits and inlets, and were now wafted along the wide expanse of the Polar basin. Nothing, it was supposed, would now obstruct their progress to Icy Cape, the western boundary of America. An alarm of land was given, but it proved to be only from an island of no great extent; more land was soon discovered beyond Cape Fellfoot, which was ascertained to be the headland to a noble bay extending on their right, which they named Maxwell Bay.

An uninterrupted range of sea still stretched out before them, though they saw on the south a line of continuous ice. Some distance onward they discovered, with deep dismay, that this ice was joined to impenetrable floes, which completely crossed the channel and joined the western point of Maxwell Bay. A violent surf was beating along the edges, and they drew back to avoid entanglement in the ice.

The officers began to amuse themselves with fruitless attempts to catch white whales, when the weather cleared, and they saw to the south an open sea with a dark water-sky. Parry, hoping that it might lead to a free passage in a lower latitude, steered toward

it, and found himself at the mouth of a great inlet, ten leagues broad, with no visible termination; to the two capes at its entrance he gave the names of Clarence and Seppings.

Finding the western shore of this inlet deeply encumbered with ice, they moved across to the eastern where was a broad and open channel. The coast was the most dreary and desolate they had ever beheld even in the Arctic world, presenting scarcely a semblance either of animal or vegetable life. Navigation was rendered more arduous from the irregularity of the compass.

After sailing a hundred and twenty miles up this inlet, the increasing width of which inspired them with corresponding hopes, with extreme consternation they suddenly perceived the ice to diverge from its parallel course, close in and run to a point of land which appeared to form the southern extremity of the eastern shore. The western horizon also appeared covered with heavy and extensive floes, a bright and dazzling ice-blink extending from shore to shore. Parry now determined to return to the old station, and watch the opportunity when the relenting ice would allow the ships to proceed westward.

On the 18th, after getting once more close to the northern shore the navigators began to make a little progress, when some showers of rain, accompanied with heavy wind, produced such an effect that on the 21st the whole ice had disappeared; they could scarcely believe it to be the same sea which had just before been covered with floes as far as the eye could reach.

Parry now crowded all sail to the westward and passed Beechy Island; after which he reached a fine and broad inlet leading to the north, which he named

Wellington. The sea up this inlet being perfectly open he would have ascended it, had there not been before him an open channel leading due west.

A favorable breeze now sprung up, and the adventurers passed gayly and triumphantly along the shores of Cornwallis Island and two smaller ones. The navigation then became extremely difficult in consequence of thick fogs, which not only froze on the shrouds but, as the compass was useless, took away all means of knowing the direction in which they sailed. They were obliged to trust to the land and ice preserving the same line, and sometimes employed the most odd expedients for ascertaining the precise point.

Pushing westward through many obstacles they at length reached the coast of an island larger than any before discovered, to which they gave the name of Melville. The wind now failed, and they slowly moved forward by towing and warping, till, on the 4th of September, Parry announced to his joyful crew, that, having reached the longitude of 110° W., they had become entitled to the reward of £5000 promised by Parliament to the first crew who should attain that meridian.

The mariners pushed forward with redoubled ardor, but soon found their course arrested by an impenetrable icy barrier. They waited nearly a fortnight in hopes of overcoming it, when the young ice began rapidly to form on the surface of the waters, and Parry was convinced that in the event of a single hour's calm he would be frozen up in the midst of the sea. No option was therefore left but to return to a harbor which had been passed on Melville Island. It was reached on the 24th, but they were obliged to cut two miles through a large floe with which it was

filled. On the 26th, the ships were anchored at about a cable's length from the beach, and soon frozen in.

The commander, finding himself and his ships shut in for a long and dreary winter, devoted his attention, with judicious activity and a mixture of firmness and kindness, to mitigate those evils which even in lower latitudes had often rendered an Arctic wintering so fatal. It was necessary to be very economical of fuel, the small quantity of moss and turf which could be collected being too wet to be of any use.

Parry's plans for keeping the men's minds in a lively and cheerful state were original, and proved effective. Arrangements were made for the occasional performance of a play, in a region very remote certainly from any to which the drama appeared congenial. Beechy was nominated stage-manager, and the officers came forward as amateur performers. The very expectation thus raised among the seamen, and the bustle of preparing a room for the purpose, were extremely salutary; and when the North Georgian theatre opened with "Miss in her Teens," the hardy tars were convulsed with laughter.

The officers had another source of amusement in the North Georgia Gazette, of which Captain Sabine became editor, and all were invited to contribute to this chronicle of the frozen regions. Even those who hesitated to appear as writers, enlivened the circle by severe but good-humored criticisms.

" Thus passed the time
Till, through the lucid chambers of the South,
Looked out the joyous Sun."

It was on the 4th of November that this great orb ought to have taken his leave; but a deep haze pre-

TRACE OF THE HECLA AND GRIFEL

PARRY'S SHIPS IN WINTER QUARTERS.

vented them from bidding a formal farewell. Amid various occupations and amusements the shortest day came on almost unexpected, and the seamen then watched with pleasure the midday twilight gradually strengthening. On the 3d of February the sun was again seen from the maintop of the Hecla. Through the greatest depth of the Polar night, the officers, during the brief twilight, had taken a regular walk of two or three hours, although never longer than a mile lest they should be overtaken by snow-drift. There was a want of objects to diversify this walk. A dreary monotonous surface of dazzling white covered land and sea: the view of the ships, the smoke ascending from them, and the sound of human voices, which through the calm and cold air was carried to an extraordinary distance, alone gave any animation to this wintry scene.

The officers, however, persevered in their daily walk, and exercise was also enforced upon the men, who, even when prevented by the weather from leaving the vessel, were made to run round the deck, keeping time to the tune of an organ. This movement they did not at first entirely relish; but no plea against it being admitted, they converted it at last into matter of frolic. By these means health was maintained on board the ships to a surprising degree, although several of the crew had symptoms of scurvy as early as January.

Further on in the season other cases of scurvy occurred, which were aggravated by an accident. As the men were taking their musical perambulation round the deck, a house erected on shore and containing a number of the most valuable instruments was seen to be on fire. The crew instantly ran, pulled off

the roof with ropes, knocked down a part of the sides, and being thus enabled to throw in large quantities of snow succeeded in subduing the flames. But their faces now presented a curious spectacle; every nose and cheek was white with frost-bites, and had to be rubbed with snow to restore circulation. No less than sixteen were added to the sick-list in consequence of this fire.

The animal tribes disappeared early in the winter from this frozen region, and there remained only a pack of wolves, which serenaded the ship nightly, not venturing to attack, but contriving to avoid being captured. A beautiful white fox was caught and made a pet of.

On the 16th of March the North Georgian theatre was closed with an appropriate address, and the general attention was now turned to the means of extrication from the ice. By the 17th of May the seamen had so far cut the ice from around the ships as to allow them to float; but in the sea it was still immovable. This interval of inaction was employed by Captain Parry in an excursion across Melville Island. The ground was still mostly covered with softened snow, and even the cleared tracts were extremely desolate, though checkered by intervals of fine verdure. Deer were seen traversing the plains in considerable numbers. To the north appeared another island to which was given the name of Sabine.

By the middle of June pools were every where formed; the dissolved water flowed in streams and even in torrents, which rendered hunting and travelling unsafe. There were also channels of water in which boats could pass; yet throughout June and July the great covering of ice in the surrounding sea

remained entire, and kept the ships in harbor. On the 2d of August, however, the whole mass broke up and floated out; and the explorers had now open water in which to prosecute their discovery.

On the 4th of August they reached the same spot where their progress had been formerly arrested. On the 15th they were enabled to make a certain progress; after which the frozen surface of the ocean assumed a more compact and impenetrable aspect than had ever before been witnessed. The officers ascended some of the lofty heights which bordered the coast; but in a long reach of sea to the westward no boundary was seen to these icy barriers. There appeared only the western extremity of Melville Island, named Cape Dundas; and in the distance a bold high coast, which they named Banks Land.

As even a brisk easterly gale did not produce the slightest movement in this frozen surface, they were led to believe that on the other side there must be a large barrier of land, by which it was held in a fixed state. On considering all circumstances, there appeared no alternative but to make their way homeward while yet the season permitted.

Lancaster Sound was left behind on the 1st of September. Passing down the west shore of Baffin's Bay, they stopped at Clyde's River, where they received visits from a tribe of Esquimaux, whose appearance and conduct pleased them all very much—lively, good-natured, and cheerful, with a great inclination to jump about when much pleased, "rendering it," says Parry, "a penalty of no trifling nature for them to sit still for half an hour together." They were decently clothed, male and female, and their children equally so, in well dressed and neatly-sewn seal skins.

Parry's arrival in Britian was hailed with the highest exultation. To have sailed upwards of thirty degrees of longitude beyond the point reached by any former navigator,—to have discovered so many new lands, islands, and bays,—to have established the much-contested existence of a Polar sea north of America,—finally, after a wintering of eleven months, to have brought back all his crew except one man in a sound condition,—were enough to raise his name above that of any former Arctic voyager.

CHAPTER XII.

CRUISE OF THE FURY AND HECLA.

(PARRY—LYON.)

No hesitation was felt in England as to sending out another expedition under Parry; and the two ships *Fury* and *Hecla*, of nearly the same size, sailed on the 8th of May, 1821. Captain George F. Lyon, already distinguished for his services in Africa, commanded the *Hecla*.

The ships arrived at the mouth of Hudson's Straits on the 2d of July, where the mariners were struck with the dreary and gloomy aspect of the shores. They were soon surrounded with bergs and floes, and had much trouble in reaching Hudson's Bay. Amid these delays the sailors were amused by the sight of three companion ships—two belonging to the Hudson's Bay Company, and one bringing out settlers for Lord Selkirk's colony. These last, who were chiefly Dutch and Germans, were seen waltzing on deck often for hours together and were only driven in by a severe fall of snow. Although almost in despair, they recreated themselves from time to time by matrimonial arrangements, in which they were so diligent, that it is said there was scarcely a ball which did not end in a marriage.

One day, when near the Savage Islands a loud shouting was heard, and soon after a number of natives were seen paddling their canoes through the lanes of open water, or drawing them over the pieces of ice. Among a great number of kayaks were five oomiaks, or women's boats. Presently a wild and noisy scene of frolic and traffic began. The natives traded with eagerness, even stripping themselves of the furs which formed their clothing, and raised shouts of triumph when they obtained in exchange for them a nail, a saw, or a razor. Their aspect was wild and their character seemed fierce and savage. Some of the ancient dames were pronounced to be most hideous objects. The children were rather pretty; though, from being thrown carelessly into the bottom of the boats, they had much the appearance of young wild animals. Besides traffic, the natives indulged in a great deal of rude frolic; one of them got behind a sailor, shouted loudly in one ear and gave him a hearty box on the other, which was hailed with a general laugh. They also carried on a dance, consisting chiefly of violent leaping and stamping, though in tolerable time.

After reaching Southampton Island, Parry sailed up Fox's Channel and passing around the north of the island came to Repulse Bay, where he ascertained that it was as Middleton had described it, without a western outlet. Its shores were far from uninviting; the surrounding land arose a thousand feet, and vegetation was very luxuriant. The remains of sixty Esquimaux habitations were found, consisting of stones laid one over the other, in circles, eight or nine feet in diameter; besides about a hundred artificial structures. fire-places, store-houses, and other walled enclos-

ures four or five feet high, used for keeping their skin canoes from being gnawed by the dogs.

Leaving Repulse Bay and sailing eastward, the explorers soon found themselves among numerous islands which formed a complete labyrinth of various shapes and sizes, while strong currents setting between them in various directions, amid fogs and drifting ice, rendered the navigation truly perilous. The *Fury* was assailed by successive masses rushing out from an inlet; her anchor was dragged along the rocks with a grinding noise, and on being drawn up, the two flukes were found to be broken off. A channel was at last found, by which the mariners made their way through this perilous maze, and found themselves in Fox's Channel, which they had left a month before.

Starting northward again they discovered several inlets, one of which they named after Captain Lyon. A party of Esquimaux were encountered, whose timidity was overcome by the hope of obtaining some iron tools. In the course of this transaction, the curiosity of the crew was roused by the conduct of a woman, who had sold one boot, but obstinately retained the other in disregard of the strongest remonstrances as to the ridiculous figure she made. At length suspicion rose to such a pitch, that, setting aside all courtesy, they seized her and pulled off the boot, in which was found two spoons and a pewter plate which she had stolen.

The end of September now approached, and Parry found himself suddenly in the depth of winter; soft or pancake ice began to form and rapidly increased till the vessel became like Gulliver bound by the feeble hands of Lilliputians. At the same time the drift-ice became cemented into one great and threat-

ening field. The navigators could no longer even attempt to reach the land, but determined to saw into an adjoining floe, and there take up their winter quarters. This work was not laborious, but far from pleasant, as the ice bent like leather beneath them.

The ships were now frozen in, and measures were taken to preserve health and comfort during the dreary winter before them. The Polar Theatre was opened in November with "The Rivals." Parry and Lyon volunteered to appear as Sir Anthony and Captain Absolute; while the ladies generously removed an ample growth of beard, disregarding the comfortable warmth which it afforded in an Arctic climate. The company were well received, and carried through their performances with unabated spirit. Evening schools were also established in both ships—the clerk of the *Fury* and a seaman of the *Hecla* acting as schoolmasters. Twenty men of each ship passed two hours every evening in these exercises, and made considerable progress in their studies.

Amid these varied and pleasing occupations the shortest day passed over their heads almost unobserved, especially as the sun never entirely left them. On Christmas-day divine service was performed on board the *Fury* and attended by the men of both ships. The sailors were regaled with fresh beef, cranberry pies, and grog, and became so extremely elevated, that they insisted on successively drinking, with three hearty cheers, the health of each officer.

The winter months were enlivened by various beautiful appearances which the sky at times presented. Those singular and beautiful streams of light, called the *Aurora Borealis*, or Northern Lights, keep up an almost incessant illumination. The light had a ten-

AURORA BOREALIS IN THE ARCTIC SEAS.

dency to form an irregular arch, which, in calm weather, was often very distinct, though its upper boundary was seldom well-defined; but, whenever the air became agitated, showers of rays spread in every direction with the brilliancy and rapidity of lightning. No rule, however, could be traced in the movement of those lighter parcels called "the merry dancers," which flew about perpetually in every direction and towards every quarter. In stormy weather the Northern Lights always became more rapid in their motions, sharing all the wildness of the blast. They gave an indescribable air of magic to the whole scene, and made it not wonderful, that by the untaught Indian they should be viewed as "the spirits of his fathers roaming through the land of souls."

On the morning of the 1st of February a number of distant figures were seen moving over the ice, and when they were viewed through glasses, the cry was raised, "Esquimaux! Esquimaux!" As it was of great importance to deal courteously and discreetly with these strangers, the two commanders formed a party of six, who walked in files behind each other that they might cause no alarm. The Esquimaux then formed themselves into a line of twenty-one, advanced slowly, and at length made a full stop. In this order they saluted the strangers by the usual movement of beating their breasts. They were substantially clothed in rich and dark deer-skins, and appeared a much more quiet and orderly race than their rude countrymen of the Savage Islands. They had pieces of whalebone in their hands which they had brought hither as a peace offering or for barter; in exchange for them they were given some nails and beads. Some of the women who had handsome furs

on which attracted attention, began to strip them off, to the great consternation of the English—as the temperature was far below zero—who were consoled on finding that they had on complete double suits.

The Esquimaux then by signs invited the English to accompany them to their habitations, which were only two miles from the ships, but had not, strange to say, been before discovered, although there was a settlement of five houses and sixty people with their canoes, sledges and dogs. The huts were made entirely of snow and ice, with ice windows at the top to admit light; entrance was effected by creeping through low passages with arched doors; the roofs were perfect arched domes, and from a circular apartment in the centre, arched doorways connected with three other rooms.

The interior of these mansions presented a scene novel and interesting. The women were seated on the beds at the sides, each one having a little fireplace, or lamp, with domestic utensils around her. The children crept behind their mothers, and the dogs, excepting those on the beds, slunk out doors in dismay. Outside, the village appeared like a cluster of hillocks, but successive falls of snow filled up the spaces between the huts and made the surface nearly level, so that the children played on the roofs, and as summer advanced occasionally thrust through them a leg or a foot.

After a cheerful and friendly visit, an invitation was given to the Esquimaux to repair to the ships, when fifty accepted it. Partly walking and partly dancing they quickly reached the vessels, where a striking congeniality of spirit was soon found to exist between them and the sailors—boisterous fun forming

to each the chief source of enjoyment. A fiddle and drum being produced, the natives struck up a dance, or rather a succession of vehement leaps, accompanied with loud shouts and yells. Seeing the Kabloonas or Whites, as they called the strangers, engaged in the game of leap-frog, they attempted to join; but not duly understanding how to measure their movements, they made such over-leaps as sometimes to come down on the crown of their heads. Their attention was specially attracted to the effects of a winch, by which one sailor forcibly drew towards him a party of ten or twelve of their number, though grinning and straining every nerve in resistance; but finding all in vain, they joined in the burst of good-humored laughter till tears streamed from their eyes.

One intelligent old man followed Lyon to the cabin, and viewed with rational surprise various objects which were presented. The performance of a hand-organ and a musical snuff-box struck him with breathless admiration; and on seeing drawings of the Esquimaux in Hudson's Strait, he soon understood them and showed the difference between their dress and appearance and that of his own tribe. On seeing the sketch of a bear, he raised a loud cry, drew up his sleeves, and showed the scars of three deep wounds received in encounters with that terrible animal. The seamen sought to treat their visitors to such delicacies as the ship afforded, but were for some time at a loss to discover how their palate might be gratified. Grog, the seaman's choicest luxury, only one old woman could be induced to taste. Sugar, sweetmeats, gingerbread, were eaten from politeness but with evident disgust; but oil and anything consisting of fat or grease, was swallowed in immense quantities, and

with symptoms of exquisite delight. An old woman, who sold her oil-pot, took care to swallow its contents and lick it clean with her tongue before parting with it. Captain Lyon, being disposed to ingratiate himself with a rather handsome young damsel, presented her with a candle; she ate the tallow with every symptom of enjoyment, and then thrust the wick into her mouth.

A large pack of wolves remained in the vicinity through the whole winter, in eager watch for any victim which might come within their reach. They took a station between the huts and the ships, ready to act against either as circumstances might dictate. They did not attack the sailors even when unarmed, though they were often seen hovering through the gloom in search of prey. Every stray dog was seized, and when extremely hungry they devoured the cables and canvas as opportunity offered. A deadly war was therefore waged against them by the sailors, and many were killed and given to the Esquimaux.

As spring advanced, the attention of the officers was almost wholly engrossed by the prospect of navigation and discovery during the approaching summer. Their Esquimaux neighbors accustomed to move from place to place, were found to have an extensive knowledge of the seas and coasts. One woman, named Iligliuk, called by her people "the wise woman," was, after a little instruction, enabled to convey to the strangers the outlines of her geographical knowledge in the form of a rude map.

Captain Lyon, in the middle of March, undertook a journey across a piece of land lying south of the ships, which had been named Winter Island. The party were scarcely gone when they encountered a heavy

gale, bringing with it clouds of drifted snow and intense cold. They dug a cave in the snow, and by huddling together round a fire to which no vent was allowed, contrived to keep up a degree of warmth. In the morning their sledge was too deeply buried beneath the drift to leave any hope of digging it out, and they started for the ships, now six miles distant, with snow falling so thick that they could not see a yard before them.

They were soon bewildered, and wandered they knew not where among heavy hummocks of ice; some began to sink into that insensibility which is the prelude to death by cold, and to reel about like drunken men. After resigning almost every hope of deliverance they providentially reached the ships, where their arrival caused indescribable joy, as they had been given up for lost, while no party could be sent in search of them without imminent risk of sharing their fate.

In May, Captain Lyon undertook another journey. He crossed Winter Island, and also the frozen strait separating it from the continent. He then proceeded some distance along the coast, crossing several bays upon the ice, and at last came in view of a bold cape, which he vainly hoped was the extreme western point of America. Here the party were overtaken by a storm of snow, which kept them imprisoned in their tents for sixty-eight hours, which dreary interval they enlivened by reading in turn from three books they chanced to have with them; as soon as the sun began to shine they hastened back to the ships.

The end of May presented a gloomy aspect, the season being more backward than it had been in the higher latitude of Melville Island. The snow was

dissolved only in spots, and hardly any symptoms of vegetation were visible; but as there was an expanse of open water in the sea without, Captain Parry determined upon sawing his way through to it. This was a most laborious process, and after the seamen had continued at it more than a fortnight, and were within forty-eight hours of completing a canal, the body of the ice made a movement which closed it entirely up. Another passage opened, and then closed, but at last open water was reached, and the ships sailed on the 2d of July.

The shores now began to put on their summer aspect; the snow had nearly disappeared, and the ground was covered with the richest bloom of Arctic vegetation. The explorers came to a fine river named Barrow, which formed a most picturesque fall down rocks richly fringed with very brilliant plants. Here the reindeer sporting, the eider-duck, the golden plover, and the snow-bunting, spreading their wings, produced a gay and delightful scene. On the 14th they reached the island of Amitioke, where they saw about two hundred walruses lying piled over each other on the loose drift-ice. A boat's crew from each ship proceeded to the attack; but these gallant amphibia, some with their cubs mounted on their backs, made the most desperate resistance; three only were killed.

They now proceeded northward, and saw before them a bold and high range of coast, separated apparently from that along which they were sailing. This feature agreeing with the map drawn by the fair Iligliuk, flattered them that they were approaching the strait exhibited by her as forming the entrance into the Polar basin. They pushed on full of hope and animation, and were farther cheered by reaching

the small island of Igloolik, which she had described as situated at the commencement of the passage. They soon saw the strait stretching westward before them in long perspective; but, alas! they discovered at the same moment an unbroken sheet of ice from shore to shore, crossing and blocking up the passage; and this not a loose accidental floe, but the ice of the preceding winter, on which the midsummer sun had not produced the slightest change.

Unable to advance a single step, they amused themselves with land excursions in different directions; and Captain Parry undertook, on the 14th of August, with a party of six, an expedition along the frozen surface of the strait. The journey was very laborious, the ice being sometimes thrown up in rugged hummocks, and occasionally leaving large spaces of open water, which it was necessary to cross on a plank, or on pieces of ice instead of boats. In four days they came in view of a peninsula terminated by a bold cape, the approach to which was guarded by successive ranges of strata, resembling the tiers or galleries of a high and commanding fortification. The party scrambled to the summit, whence they enjoyed a most gratifying spectacle. They were at the narrowest part of the strait, here about two miles across, and a tide or current was running through it at the rate of two miles an hour. Westward the shores on each side receded, till, for three points of the compass and amid a clear horizon no land was visible. The captain doubted not that from this position he beheld the Polar sea; and hoped notwithstanding the formidable barriers of ice which intervened to force his way into it. He named this the Strait of the Fury and Hecla, and gave the sailors an extra can of grog, to drink a safe and speedy passage through its channel.

Parry now lost no time in returning to the ships, where his arrival was seasonable, for the opposing barrier which had been gradually softening and cracking, at once almost entirely disappeared. On the 21st the ships got under way; and, though retarded by fogs and other obstructions, arrived on the 26th at that narrowest channel which the commander had formerly reached. A brisk breeze now sprang up, the sky cleared, they dashed across a current of three or four knots an hour, and sanguinely expected entire success. Suddenly, from the crow's nest above, it was announced that ice filled the channel. In an hour they reached this barrier, and finding it soft, spread all their canvas and forced their way into it a distance when they were stopped. From this point, during the whole season, the ships were unable to advance.

Captain Lyon undertook an expedition southward, to ascertain if any inlet or passage from sea to sea in this direction had escaped notice. The country was so filled with high rocky hills, and with chains of lakes in which much ice was floating, that he could not proceed above seven miles. Though it was the beginning of September, the season was only that of early spring. Another excursion was made by a party who penetrated sixty miles westward along the southern coast of Cockburn Island, till they reached a pinnacle, whence they saw the Polar ocean spreading before them; but tremendous barriers of ice filled the strait, and precluded all approach.

It was now the middle of September, and the usual symptoms of deer trooping in herds southward, floating pieces of ice consolidating into masses, and the thin crust forming on the surface of the waters, reminded the mariners not only that they could hope

for no farther removal of the obstacles which arrested their progress, but that they must lose no time in providing winter-quarters. The middle of the strait, at the spot where they had been first stopped, was a favorable station for future discovery ; but prudence suggested a doubt whether the ships enclosed in this icy prison could ever be released.

On the 30th of October, by the usual operation of sawing, the ships were established in a harbor at Igloolik. The ensuing season was passed with the most careful attention to the health and comfort of the crews ; but though their spirits did not sink, there appears to have been on the whole, less gayety and lightness of heart than in the two former winterings, and the drama and school were not revived. On the 5th of January 1823, the horizon was so brightly suffused with red, that they hoped to see the sun ; but a fortnight of thick fog occasioned a disappointment. On the 19th, the sky having cleared, they saw it rise attended by two parhelia, and both crews turned out to enjoy the novelty and splendor of this cheering spectacle.

The sailors found at Igloolik a colony of Esquimaux, who received them at first with surprise and some degree of alarm ; but on learning they were from Winter Island and intimate with its tenants of last season, they hailed them at once as familiar acquaintances. These natives belonged to the same tribe, and were connected by alliance and close relationship with many individuals of the Winter Island party, of whom, therefore, they were delighted to receive tidings. The crews spent the winter with them on quite a friendly footing, and rendered important services to them during a period of severe sickness.

The navigators were received with the most cordial hospitality into the little huts, where the best meat was set before them, and the women vied with each other in the attentions of cooking, drying and mending their clothes. "The women working and singing, their husbands quietly mending their lines, the children playing before the door, and the pot boiling over the blaze of a cheerful lamp," gave a pleasing picture of savage life. Yet a continued intercourse showed that the Esquimaux inherited their full share of human frailty. The fair Esquimaux are charged with a strong propensity to slander, which was natural to them as they sat in circles round the door mending their lines. Their own conduct, meantime, is said to have afforded ample scope for censure, especially in regard to conjugal fidelity.

The principal deity of these people was Aywillaiyoo, a female, immensely tall, with only the left eye, and wearing a pigtail reaching to her knee. Lyon witnessed a mighty incantation, in which Toolemak, the chief magician, summoned Aywillaiyoo to the upper world to utter her oracles. The party were assembled in a hut, where light after light was put out till they were left in total darkness. Toolemak then, after loud invocations, professed to descend to the world below to bring up the goddess. Soon there arose a low chant of peculiar sound, imagined to be the voice of Aywillaiyoo. During half an hour, in reply to the loud screams and questions of her votaries, she uttered dubious and mystical responses; after which the sound died away, and she was supposed to descend beneath the earth; then Toolemak with a shout announced his own return to the upper world.

The natives believe also in a future world, the em-

ployments and pleasures of which, according to the usual creed of savage races, are all sensual. The soul descends beneath the earth through successive abodes, the first of which has somewhat of the nature of purgatory; but the good spirits passing through it find the other mansions successively improve, till they reach that of perfect bliss, far beneath, where the sun never sets, and where, by the side of large lakes that never freeze, the deer roam in vast herds and the seal and walrus always abound in the waters.

One of the Esquimaux having lost his wife, as it was very difficult to dig a grave, the sailors piled over her a heap of stones to protect her from wild animals. The man gave thanks, but not cordially; he even expressed a dread lest the weight would be painfully felt by his deceased spouse; and soon after, when an infant died, he declared her wholly incapable of bearing such a burden and would allow nothing but snow to be laid over her.

The spring proved singularly backward, and it was the 7th of August before they were able, by hard sawing, to reach the open sea; by which time hope of effecting any thing important during that season was relinquished. The voyage homeward was soon afterward commenced, and the explorers reached England in October. As nothing had been heard of them during their two years' absence, they were viewed almost as men risen from the dead. The bells of Lerwick were rung, and other extraordinary demonstrations of joy made on their arrival.

A third expedition under Parry sailed from England on the 19th of May, 1824. It consisted of the two ships with which he had made his last voyage—the *Hecla* and *Fury*, the latter being commanded

by Capt. H. P. Hoppner, who had already made several voyages with Parry. It was not till the 10th of Sept. that they were able to enter Lancaster Sound, and on the 1st of October they anchored for the winter at Port Bowen in Prince Regent's Inlet.

As the amusements of former winters had been worn threadbare, masquerades were started and kept up monthly throughout the winter. Schools also were opened and continued with much benefit to the scholars.

On the 19th of July, by sawing through the ice the navigators reached open water and proceeded down the inlet, which was filled with fragments of ice, making navigation dangerous. Subsequently they drifted with the ice till the ships lay close to the shore, over which towered high perpendicular cliffs, fragments from which were constantly falling.

About the first of August a gale came on, which drove the ice against the ships so that they became unmanageable, and were carried along with great speed and grounded on the icy beach. Both vessels were severely nipped, but got off with high water.

On the 21st the *Fury* was again forced on shore, and as it was impossible to repair her she was abandoned, and her crew went on board the *Hecla*. Years afterward the stores of the deserted ship served to comfort and sustain British sailors when in circumstances of great peril.

The incessant labor and anxiety and the frequent imminent danger into which the *Hecla* was thrown in the attempts to save her comrade, continued for nearly a month, destroyed every chance of accomplishing the objects of the voyage; Parry therefore started for England where he arrived in October.

CHAPTER XIII.

VOYAGE OF THE DOROTHEA AND TRENT.

(BUCHAN—FRANKLIN.)

THE English Expedition toward the Pole in 1818, referred to in Chapter IX, was commanded by Captain David Buchan, who sailed in the Dorothea; the other ship of the expedition, the Trent, was commanded by Lt. John Franklin. Frederic Beechy, who published an account of the voyage, and George Back were officers on the latter vessel.

The ships left England in April, their appointed place of rendezvous in case of separation being Magdalena Bay, Spitzbergen. They reached Bear Island toward the close of May; here the walrus were very numerous and were carefully studied. Their affection for their young, their unflinching courage in defending them, and their conduct towards a wounded companion were remarkable. It was noticed in a fight with them, that when one was wounded others desisted from the attack and assisted their companion from the field of battle, swimming around him and holding him up with their tusks.

Early in June the two ships anchored in Magdalena Bay, in the vicinity of numerous glaciers, the smallest of which, called the Hanging Iceberg, was two hundred

feet above the water on the slope of a mountain. So easily were large fragments of ice detached from these glaciers that silence became necessary. The firing of a gun rarely failed to be followed by an avalanche, and two of these witnessed by Beechy were on the most magnificent scale. An immense piece slid from a mountain into the bay, where it disappeared, and nothing was seen but a violent commotion of the water and clouds of spray. On re-appearing it raised its head a hundred feet above the surface with water pouring down from all parts of it. When it became stationary it was measured and estimated to weigh 421,660 tons.

The avalanche in falling into the water, made such a commotion that the *Dorothea*, which was anchored four miles distant, was careened over and had to be set right by releasing the tackles.

The explorers left this locality on the 7th of June, and sailing northward passed the north-western boundary of Spitzbergen. Beyond Red Bay they were stopped by the ice and remained imbedded in a floe for thirteen days, and afterward took shelter in Fair Haven.

On the 6th of July the explorers again sailed north, but soon after encountered ice through which were channels of water. As the wind was favorable one of them was entered, but at evening it closed up and all attempts to get farther were in vain, as they were continually drifted south with the ice. The highest latitude reached was $80^{\circ} 34'$.

Having given this route a fair trial Buchan started toward the Greenland coast. While sailing along the edge of the ice a sudden gale arose, and to escape wreck the ships steered straight toward the pack, sur-

rounded by immense pieces of ice. It was doubtful what the result would be when the ships reached the solid ice, but the crew preserved the greatest calmness and resolution. Beechy says:—"I will not conceal the pride I felt in witnessing the bold and decisive tone in which the orders were issued by the commander of our little vessel (Franklin), and the promptitude and steadiness with which they were executed by the crew. Each person instinctively secured his own hold and, with his eyes fixed upon the masts, awaited in breathless anxiety the moment of concussion. It soon arrived; the brig, cutting her way through the light ice, came in violent contact with the main body. In an instant we all lost our footing, the masts bent with the impetus, and the cracking timbers from below bespoke a pressure which was calculated to awaken our serious apprehensions. The ship's motion was so great that the bell, which in the heaviest gale of wind had never struck of itself, now tolled so continually that it was ordered to be muffled for the purpose of escaping the unpleasant associations it was calculated to produce."

For a few hours the explorers remained fast in this trying position; then the gale ceased, and the pack broke up sufficiently to release the ships which were greatly damaged—the *Dorothea* being in a foundering condition. They made their way to Fair Haven, and after partially repairing the ships sailed for home where they arrived in October. This was Franklin's first Arctic voyage.

CHAPTER XIV.

FRANKLIN'S LAND EXPEDITIONS TO THE SHORES OF THE POLAR SEA.

THE English Government having determined upon sending an Expedition from the shores of Hudson's Bay by land, to explore the northern coast of America from the mouth of the Coppermine River to the eastward, Lieut. John Franklin was appointed its commander, and, with Surgeon John Richardson and Midshipmen George Back and Robert Hood, all of the Royal Navy, embarked on Sunday the 23d of May 1819, at Graysend, England, on board the ship *Prince of Wales*, belonging to the Hudson's Bay Company. The ship arrived at its destination, York Factory, on the western shores of Hudson's Bay, Aug. 30th, having narrowly escaped total wreck—being carried on to the rocky coast of Labrador in a dense fog, from which position she was extricated in a leaky condition.

At this time a violent competition for the fur trade existed between the North-west and the Hudson's Bay Companies, which finally led to the extinction of the first named. The officers and employes of both companies were directed by the Government to render the explorers every aid needed. Governor Williams of the H. B. Co. received them at York Factory, and they were soon fitted out with a suitable boat, and a crew made up mostly from the ship's company. On

the 9th of September, they began their journey by way of the rivers and lakes, to the mouth of the Coppermine River, distant over fifteen hundred miles, on the shores of the Polar Sea. They were soon afterwards overtaken by boats of the Company. A portion of the following history of their travels is given in the words of Franklin and his companions.

“We embarked at noon, and were honored with a salute of eight guns and three cheers from the Governor and all the inmates of the fort, assembled to witness our departure. We gratefully returned their cheers, and then made sail, much delighted at having now commenced our voyage into the interior of America. The wind and tide failing us at the distance of six miles above the Factory, and the current being too rapid for using oars to advantage, the crew had to commence tracking, or dragging the boat by a line, to which they were harnessed. This operation is extremely laborious in these rivers. At sunset we landed, and pitched the tent for the night, having made a progress of twelve miles. A large fire was quickly kindled, supper speedily prepared, and as readily despatched, when we retired with our buffalo robes on, and enjoyed a night of sound repose.

“On the morning of the 18th, the country was clothed in the livery of winter, a heavy fall of snow having taken place during the night. It is not easy for any but an eye-witness to form an adequate idea of the exertions of the Orkney boatmen in the navigation of this river. The necessity they were under of frequently jumping into the water, to lift the boats over the rocks, compels them to remain the whole day in wet clothes, at a season when the temperature is far below the freezing point. The immense loads too,

which they carry over the portages, is not more a matter of surprise than the alacrity with which they perform these laborious duties.

“On the 22d, our route led us amongst many wooded islands, which lying in long vistas, produced scenes of much beauty. In the course of the day we crossed the Upper Portage, surmounted the Devil's Landing Place, and urged the boats with poles through Groundwater Creek. At the upper end of this creek, our bowman having given the boat too broad a sheer, to avoid the rock, it was caught on the broadside by the current, and, in defiance of our utmost exertions, hurried down the rapid. Fortunately, however, it grounded against a rock high enough to prevent the current from oversetting it, and the crews of the other boats having come to our assistance, we succeeded, after several trials, in throwing a rope to them, with which they dragged our almost sinking vessel stern foremost up the stream, and rescued us from our perilous situation.

“The Painted Stone is a low rock, ten or twelve yards across, remarkable for the marshy streams which arise on each side of it, taking different courses. On the one side, the water-course which we have navigated from York Factory commences. On the other side of the stone the Echemamis arises. Having launched the boats over the rock, we commenced the descent of that river, and reached the mouth of the Saskatchewan at midnight, October 9th.

“On the morning of the 20th we came to a party of Indians, encamped behind the bank of the river, on the borders of a small marshy lake. Here we were gratified with the view of a very large tent; its covering was moose deer leather, with apertures for the es-

cape of the smoke from the fires which were placed at each end ; a ledge of wood was placed on the ground on both sides of the whole length of the tent, within which were the sleeping places, arranged probably according to families ; and the drums and other instruments of enchantment were piled up in the centre. Governor Williams gave a dram and a piece of tobacco to each of the males of the party."

The travelers reached Cumberland House, a trading post (originally built by Hearne) October 22d, and as winter was setting in, making travel by water impracticable, made a long halt there.

"After the 20th December the weather became cold, the thermometer constantly below zero. Christmas-day was particularly stormy ; but the gale did not prevent the full enjoyment of the festivities which are annually given at the Cumberland House on this day. All the men who had been despatched to different parts in search of provision or furs returned to the fort on the occasion, and were regaled with a substantial dinner and a dance in the evening.

"The new year 1820 was ushered in by repeated discharges of musketry ; a ceremony which has been observed by the men of both the trading Companies for many years. Our party dined with Mr. Connolly, and were regaled with a beaver, which we found extremely delicate. In the evening his men were entertained with a dance, in which the Canadians exhibited some grace and much agility ; and they contrived to infuse some portion of their activity and spirits into the steps of their female companions. The half-breed women are passionately fond of this amusement."

On the 18th of January, Franklin, Back, and John Hepburn, a seaman, set out on snow shoes for a journey

to Fort Chipewyan, eight hundred and fifty-seven miles to the north. They were provided with two carioles and two sledges, with their drivers and dogs. Being accompanied by Mr. Mackenzie, of the Hudson's Bay Company, who was going to Isle a la Crosse, with four sledges under his charge, they formed quite a procession, keeping in an Indian file, in the track of the man who preceded the foremost dogs.

The travelers rested occasionally at the trading posts which lay on their route. At Carlton House they were visited by the Stone Indians, who lived in that section and were famous for stealing everything they could find, particularly horses, which they maintained were common property sent by the Almighty for the general use of man. They kept in amity with their neighbors the Crees, from motives of interest; and the two tribes united in determined hostility against the nations dwelling to the westward, which were generally called Slave Indians—a term of reproach applied by the Crees to those tribes against whom they have waged successful wars.

While at Carlton House, Franklin went six miles to visit a Cree encampment. The chief's tent had been arranged for the occasion, fresh grass was spread on the ground, and buffalo robes were placed opposite the door to sit on; and a kettle was on the fire to cook meat. The chief, an old man, welcomed him with a hearty shake of the hand and the customary salutation of "What cheer?"

"After a few minutes' conversation, an invitation was given to the chief and his hunters to smoke the calumet with us, as a token of our friendship: this was loudly announced through the camp, and ten men from the other tents immediately joined our party.

WATCHING FOR INDIAN POBBLE-THIEVES.

On their entrance the women and children, whose presence on such occasions is contrary to etiquette, withdrew. The calumet having been prepared and lighted by Mr. Pruden's clerk, was presented to the chief, who, on receiving it, performed the following ceremony before he commenced smoking:—He first pointed the stem to the south, then to the west, north, and east, and afterwards to the heavens, the earth, and the fire, as an offering to the presiding spirits;—he took three whiffs only, and then passed the pipe to his next companion, who took the same number of whiffs, and so did each person as it went round."

The Crees catch buffalo by driving them into a large enclosure or pound; they also hunt them on horseback; and when the creatures are very shy they crawl towards them disguised in the skins of the wolf—an animal with which the buffalo are familiar, and, when in herds, not afraid of.

At their departure from one trading post the travelers were much amused by a salute of musketry fired by half-breed women—the men being all absent. At another place a dance was given in their honor. On the 26th of March they reached Fort Chipewyan, and there halted for their companions who were to come on with the boats after navigation opened.

Dr. Richardson, who with Mr. Hood passed the winter at Cumberland House, gives an interesting account of his residence there, and of the Cree Indians, who were frequent visitors at the fort:—

"The winter proved extremely severe to the Indians. Those who were able came to the fort and received relief; but many who had retired with their families to distant corners, to pursue their winter hunts, experienced all the horrors of famine. One evening a poor

Indian entered the North-west Company's House, carrying his only child in his arms, and followed by his starving wife. They had been hunting apart from the other bands, had been unsuccessful, and whilst in want were seized with the epidemical disease. They had walked several days without eating, yet exerting themselves far beyond their strength that they might save the life of the infant. It died almost within sight of the house. Mr. Connolly, who was then in charge of the post, received them with the utmost humanity, and instantly placed food before them ; but no language can describe the manner in which the miserable father dashed the morsel from his lips and deplored the loss of his child. Misery may harden a disposition naturally bad, but it never fails to soften the heart of a good man.

“ Every Cree fears the medical or conjuring powers of his neighbor ; but at the same time exalts his own attainments to the skies. ‘I am God-like’ is a common expression amongst them, and they prove their divinityship by eating live coals, and by various tricks of a similar nature. A medicine bag is an indispensable part of a hunter's equipment, and is, when in the hands of a noted conjurer, such an object of terror to the rest of the tribe, that its possessor is enabled to fatten at his ease upon the labors of his deluded countrymen.

“ A fellow of this description came to Cumberland House in the winter of 1819. The mighty conjuror, immediately on his arrival at the house, began to trumpet off his powers, boasting, among other things, that although his hands and feet were tied as securely as possible, yet, when placed in a conjuring-house, he would speedily disengage himself by the aid of two

or three familiar spirits, who were attendant on his call. He was instantly taken at his word, and that his exertions might not be without an aim, a *capot* or great coat was promised as the reward of his success.

"A conjuring-house having been erected in the usual form, that is, by sticking four willows in the ground, and tying their tops to a hoop at the height of six or eight feet, he was fettered completely, and placed in its narrow compartment. A moose skin then being thrown over the frame, secluded him from our view. He forthwith began to chant a kind of hymn in a very monotonous tone.

"The rest of the Indians, who seemed in some doubt respecting the powers of a devil when put in competition with those of a white man, ranged themselves round, and watched the result with anxiety. Nothing remarkable occurred for a long time. The conjurer continued his song at intervals, and it was occasionally taken up by those without. In this manner an hour and a half elapsed; but at length our attention, which had begun to flag, was roused by the violent shaking of the conjuring-house. It was instantly whispered round the circle, that at least one devil had crept under the moose-skin. But it proved to be only the "God-like man" trembling with cold. He had entered the lists, stripped to the skin, and the thermometer stood very low that evening. His attempts were continued, however, with considerable resolution for half an hour longer, when he reluctantly gave in. He had found no difficulty in slipping through the noose when it was formed by his countrymen; but, in the present instance the knot was tied by Governor Williams, who is an expert sailor.

"These Indians, however capable they are of behav-

ing kindly, affect in their discourse to despise the softer sex, and on solemn occasions will not suffer them to eat before them, or even come into their presence. In this they are countenanced by the white residents, most of whom have Indian or half-breed wives, but seem afraid of treating them with the tenderness or attention due to every female, lest they should themselves be despised by the Indians.

“Both sexes are fond of, and very indulgent to their children. The father never punishes them, and if the mother, more hasty in her temper, sometimes bestows a blow or two on a troublesome child, her heart is instantly softened by the roar which follows, and she mingles her tears with those that streak the smoky face of her darling. Tattooing is almost universal.

“A Cree places great reliance on his drum, and I cannot adduce a stronger instance than that of the poor man who is mentioned in a preceding page, as having lost his only child by famine, almost within sight of the fort. Notwithstanding his exhausted state, he had an enormous drum tied to his back.

“It was not very uncommon amongst the Canadian voyagers for one woman to be common to, and maintained at the joint expense of two men; nor for a voyager to sell his wife, either for a season or altogether, for a sum of money, proportioned to her beauty and good qualities, but always inferior to the price of a team of dogs.

“The chiefs among the Chipewyans are now totally without power. The traders, however, endeavor to support their authority by continuing towards them the accustomed marks of respect, hoisting the flag, and firing a salute of musketry on their entering the fort.

“The Northern Indians evince no little vanity, by assuming to themselves the comprehensive title of “The People,” while they designate all other nations by the name of their particular country. They suppose that they originally sprang from a dog; and, about five years ago, a superstitious fanatic so strongly pressed upon their minds the impropriety of employing these animals, to which they were related, for purposes of labor, that they universally resolved against using them any more, and, strange as it may seem, destroyed them. They now have to drag everything themselves on sledges.

“This tribe, since its present intimate connection with the traders, has discontinued its war excursions against the Esquimaux, but they still speak of that nation in terms of the most inveterate hatred.”

On the 13th of July, Richardson and Hood arrived at Fort Chipewyan with two canoes, and were warmly greeted by Franklin and Back, who were waiting for them. Final arrangements were now made for the voyage northward; on the 18th of July the party set out, and arrived at Fort Providence, north of the Great Slave Lake, on the 29th of July.

Here the travelers were visited by an Indian chief named Akaitcho, who, with some of his men as hunters and guides, was to accompany the expedition.

“As we were informed that external appearances made lasting impressions upon the Indians, we prepared for the interview by decorating ourselves in uniform, and suspending a medal round each of our necks. Our tents had been previously pitched, and over one of them a silken union flag was hoisted. Soon after noon, on July 30th, several Indian canoes were seen advancing in a regular line, and on their approach,

the chief was discovered in the headmost, which was paddled by two men. On landing at the fort, the chief assumed a very grave aspect, and walked up to Mr. Wentzel with a measured and dignified step, looking neither to the right nor to the left, at the persons who had assembled on the beach to witness his debarkation, but preserving the same immovability of countenance until he reached the hall, and was introduced to the officers. When he had smoked his pipe, drank a small portion of spirits and water himself, and issued a glass to each of his companions, who had seated themselves on the floor, he commenced his harangue, by mentioning the circumstances that led to his agreeing to accompany the expedition, an engagement which he was quite prepared to fulfill.

“Akaitcho and the guides having communicated all the information they possessed on the different points to which our questions had been directed, I placed my medal round the neck of the chief, and the officers presented theirs to an elder brother of his and the two guides. Being conferred in the presence of all the hunters, their acquisition was highly gratifying to them, but they studiously avoided any great expression of joy, because such an exposure would have been unbecoming the dignity which the senior Indians assume during a conference.

“We presented to the chief, the two guides, and the seven hunters, who had engaged to accompany us, some cloth, blankets, tobacco, knives, daggers, besides other useful iron materials, and a gun to each ; also a keg of very weak spirits and water, which they kept until the evening, as they had to try their guns before dark, and make the necessary preparations for commencing the journey on the following day. The In-

dians, however, did not leave us on the next day, as the chief was desirous of being present, with his party, at the dance, which was given in the evening to our Canadian voyagers. They were highly entertained by the vivacity and agility displayed by our companions in their singing and dancing: and especially by their imitating the gestures of a Canadian, who placed himself in the most ludicrous postures; and, whenever this was done, the gravity of the chief gave way to violent bursts of laughter. In return for the gratification Akaitcho had enjoyed, he desired his young men to exhibit the Dog-Rib Indian dance."

Franklin and his three companions, with Frederic Wentzel of the North-west Co., John Hepburn, seventeen Canadian voyagers, and three Indian interpreters, left Fort Providence on the 2d of August, in three canoes. There was also a smaller canoe to convey the wives of three of the voyagers, and their three children, in company with a fleet of Indian canoes they paddled up the Yellow Knife River, toward a country which had never been visited by Europeans.

"Akaitcho caused himself to be paddled by his slave, a young man, of the Dog-Rib nation, whom he had taken by force from his friends; when he thought himself, however, out of reach of our observation, he laid aside a good deal of his state, and assisted in the labor; and after a few day's further acquaintance with us, he did not hesitate to paddle in our presence, or even carry his canoe on the portages."

The party met with some hardships, were at times short of provisions, and some of the voyagers showed a spirit of insubordination which Franklin promptly quelled by threats of severest punishment. On the 20th of August they halted on the bank of

Winter Lake, and built Fort Enterprise, where they passed the winter; its distance from Fort Chipewyan was 533 miles.

Franklin was anxious to push on to the sea that fall, but was forced to relinquish the idea from the refusal of Akaitcho to go with him owing to scarcity of game on the route.

On the 18th of October, Mr. Back and Mr. Wentzel, set out for Fort Providence, accompanied by two voyagers, Beaubarant and Belanger, and two Indians, with their wives.

“On the 23d of November, Belanger returned alone; he had walked constantly for the last six-and-thirty hours, leaving his Indian companions encamped at the last woods, they being unwilling to accompany him across the barren grounds during the storm that had prevailed for several days, and blew with unusual violence on the morning of his arrival. His locks were matted with snow, and he was incrustated with ice from head to foot, so that we scarcely recognized him when he burst in upon us. We welcomed him with the usual shake of the hand, but were unable to give him the glass of rum which every voyager receives on his arrival at a trading post.”

On the 26th of October, Akaitcho, with his party came into camp, owing to the deer having gone south; and on the 5th of November, fishing had to be relinquished. As so large a number of people could not be provided for at the place, the Indians left again on the 10th of December.

“Keskarrah the guide, with his wife and daughter remained behind. The daughter whom we designated Green-Stockings from her dress, is considered by her tribe to be a great beauty. Mr. Hood drew an ac-

curate portrait of her, although her mother was averse to her sitting for it. She was afraid, she said, that her daughter's likeness would induce the great chief who resided in England to send for the original. The young lady, however, was undeterred by any such fear. She has already been an object of contest between her countrymen, and although under sixteen years of age, has belonged successively to two husbands, and would probably have been the wife of many more, if her mother had not required her services as a nurse."

Of their winter residence at this place Franklin says:—

"The Sabbath was always a day of rest with us; the woodmen were required to provide for the exigencies of that day on Saturday, and the party were dressed in their best attire. Divine service was regularly performed, and the Canadians attended, and behaved with great decorum, although they were all Roman Catholics, and but little acquainted with the language in which the prayers were read.

"Our diet consisted almost entirely of the reindeer meat, varied twice a week by fish, and occasionally by a little flour, but we had no vegetables of any description. On the Sunday mornings we drank a cup of chocolate, but our greatest luxury was tea (without sugar), of which we regularly partook twice a day. With reindeer's fat, and strips of cotton shirts, we formed candles; and Hepburn acquired considerable skill in the manufacture of soap, from wood-ashes, fat, and salt."

On the 27th of December, Mr. Wentzel arrived with two Esquimaux interpreters who had been engaged. Their English names were Augustus and

Junius. The former spoke English. Parties also arrived from time to time bringing on the stores which had been left at Fort Providence.

“On the 17th of March, Mr. Back returned from Fort Chipewyan, having traveled since he started out more than one thousand miles on foot, with no shelter at night excepting a blanket and deer skin, and often without food. The Indians had sometimes given him a fish or bird which they caught, with the remark, “we are accustomed to starvation, and you are not.”

“On the 21st of April, all our men returned from the Indians, and Akaitcho was on his way to the fort. In the afternoon two of his young men arrived to announce his visit, and to request that he might be received with a salute and other marks of respect that he had been accustomed to on visiting Fort Providence in the Spring. I complied with his desire although I regretted the expenditure of ammunition, and sent the young men away with the customary present of powder to enable him to return the salute, some tobacco, vermilion to paint their faces, a comb, and a looking-glass.

“At eleven Akaitcho arrived; upon the first notice of his appearance the flag was hoisted at the fort, and upon his nearer approach, a number of muskets were fired by a party of our people, and returned by his young men. Akaitcho preceded by his standard-bearer, led the party, and advanced with a slow and solemn step to the door where Mr. Wentzel and I received him. The faces of the party were daubed with vermilion, the old men having a spot on the right cheek, the young ones on the left. Akaitcho himself was not painted. On entering he sat down on a chest, the rest placing themselves in a circle on the floor.

The pipe was passed once or twice round, and in the meantime a bowl of spirits and water, and a present considerable for our circumstances, of cloth, blankets, capots, shirts, &c., was placed on the floor for the chief's acceptance, and distribution amongst his people. Akaitcho then commenced his speech, but I regret to say, that it was very discouraging, and indicated that he had parted with his good humor, at least since his March visit."

On the 4th of June, a part of the company under Richardson, started northward; some dragged stores on sledges, and others carried them on their backs. Another party started June 14th, with canoes dragged by men and dogs. On the 21st, the whole expedition, with Akaitcho and some of his hunters, was encamped at Point Lake. The Indian families and the rest of the tribe had gone off to a large lake to spend the summer, and Akaitcho who had expended the ammunition given to him, finally admitted that nearly all of it had been given to those who had gone with the Indian families; Franklin was greatly distressed at this occurrence.

Five hunters were now sent ahead to hunt; and on the 25th of June the journey was resumed, Akaitcho and five other Indians accompanying the travelers. On the 29th "our attention was directed to some pine branches scattered on the ice, which proved to be marks placed by our hunters, to guide us to the spot where they had deposited the carcasses of two small deer. This supply was very seasonable, and the men cheerfully dragged the additional weight."

On the 1st of July they embarked on the Coppermine River, which was there two hundred yards wide and ten feet deep, and run very rapidly over a rocky

bottom. They now descended the river to a place named by Hearne, the Bloody Falls, in consequence of a dreadful massacre there of Esquimaux by the Chipewyan Indians. As it was a customary resort of Esquimaux, Junius and Augustus were sent forward, armed with concealed pistols, and with beads, looking glasses, etc., to conciliate their countrymen by presents. They fell in with a small party of them, who appeared to be mild, peaceable creatures; but they disappeared in the night.

“On the morning of the 16th, just as the crew were putting the canoe in the water, Adam arrived in the utmost consternation, and informed us that a party of Esquimaux were pursuing the men whom he had sent to collect floats. The orders for embarking were instantly countermanded, and we went with a party of men to their rescue. We soon met our people returning at a slow pace, and learned that they had come unawares upon the Esquimaux party, which consisted of six men, with their women and children, who were traveling towards the rapid with a considerable number of dogs carrying their baggage. The women hid themselves on the first alarm, but the men advanced, and stopping at some distance from our men, began to dance in a circle, tossing up their hands in the air and accompanying their motions with much shouting, to signify, I conceive, their desire of peace. Our men saluted them by pulling off their hats, and making bows, but neither party was willing to approach the other; and, at length, the Esquimaux retired to the hill, from whence they had descended when first seen.

“We proceeded in the hope of gaining an interview with them, but lest our appearance in a body should

HUNTERS WINTER CAMP

alarm them, we advanced in a long line, at the head of which was Augustus. We were led to their baggage, which they had deserted, by the howling of the dogs; and on the summit of the hill we found, lying behind a stone, an old man, who was too infirm to effect his escape with the rest. He was much terrified when Augustus advanced, and probably expected immediate death; but that the fatal blow might not be unrevenged, he seized his spear, and made a thrust with it at his supposed enemy. Augustus, however, easily repressed his feeble effort, and soon calmed his fears by presenting him with some pieces of iron, and assuring him of his friendly intentions."

On the 17th, nine Esquimaux appeared on the bank of the river opposite the encampment, carrying their canoes on their backs, but they fled on seeing the tents. Not only were these people alarmed, but the Indians also were so terrified that they insisted on returning the next day; nor could Franklin induce even one hunter to remain with him. The interpreters too were much frightened and requested their discharge; but it was refused, and they were closely watched to prevent their desertion.

The reduced party proceeded, and on the 18th of July reached the Polar Sea. The Canadians were much interested at the first view, although despondent, and Hepburn, the English sailor, was quite elated at beholding again his favorite element.

On the 19th, Mr. Wentzel and four discharged Canadians started on their return southward. The party now numbered about twenty, who, in two canoes with fifteen day's provisions, embarked 21st July, to navigate the sea to the eastward.

They proceeded on, along a dreary coast, making new

discoveries, but meeting no Esquimaux from whom they had hoped to get provisions, which were rapidly diminishing. A few deer and a bear were caught, and a very few fish.

On the 30th of July they passed the mouth of a river which they named Hood. On the 5th of August they reached the mouth of a river which is now known as Back, or Great Fish River.

On the 15th of August the canoes were found to be in an unseaworthy condition, and there was only three day's supply of provisions remaining, with poor prospects of obtaining more. "It was evident that the time spent in exploring the Arctic and Melville Sounds and Bathurst's Inlet, had precluded the hope of reaching Repulse Bay, which at the outset of the voyage we had fondly cherished; and it was equally obvious that as our distance from any of the trading establishments would increase as we proceeded, the hazardous traverse across the barren grounds, which we should have to make, if compelled to abandon the canoes upon any part of the coast, would become greater."

The most eastern land seen was Point Turn-again, distant from Coppermine River by the way they came nearly six hundred miles. The return journey was begun on the 22d of August, and on the 25th the party encamped on the banks of Hood's River, at the foot of the first rapids. "Here terminated our voyage on the Arctic sea, during which we had gone over six hundred and fifty geographical miles. Our Canadian voyagers could not restrain their expressions of joy at having turned their backs on the sea, and they passed the evening talking over their past adventures with much humor and no little exaggeration. The consideration that the most painful, and certainly the most

hazardous, part of the journey was yet to come, did not depress their spirits at all."

At a few miles up Hood's River, it runs for about a mile through a narrow chasm, the walls of which are upward of two hundred feet in height, and quite perpendicular. Through this chasm the river precipitates itself in two magnificent falls, close to each other. The large canoes not being suited to this river, two smaller ones were constructed out of their materials, to be used when crossing rivers.

The construction of the new canoes detained them till the first of September, when it was decided to make a direct line to the part of Point Lake opposite the Spring encampment, distant only 149 miles in a straight line from where they were. Having proceeded twelve miles, a snow-storm obliged them to encamp, and on the 3d, the last piece of pemmican and a little arrow-root were distributed for supper.

The violence of the storm continued till the 7th; and for several days, having nothing to eat, and no means of making a fire, they remained whole days in bed, and, with a temperature of 20° , without fire, the party weak from fasting, their garments and tents frozen stiff and the ground covered with three feet of snow, their condition was very unfit for traveling in such a country. On trying to proceed, Franklin was seized with a fainting-fit, in consequence of exhaustion and sudden exposure to the wind, but on eating a morsel of portable soup he recovered. One of the canoes was broken to pieces, and a fire was made with it to cook the remnant of portable soup and arrow-root; a scanty meal after three days' fasting.

The next two days the surface of the barren grounds was covered with large stones, bearing a

lichen which the Canadians call *tripe de roche* or, rock-tripe, a substance to which the travelers may be said to owe their safety and existence; without it they must all have died of starvation.

An unknown river was crossed on the 9th. The canoe being put into the water was found very leaky, but it was managed with much dexterity by St. Germain, Adam, and Peltier, who ferried over one passenger at a time, causing him to lie flat in its bottom. The next day a musk-ox was shot. To skin and cut up the animal was the work of a few minutes. The contents of its stomach were devoured upon the spot, and the raw intestines, which were next attacked, were pronounced by the most delicate to be excellent.

On the 13th several of the party were sick from eating rock-tripe, and it was then discovered that the fishing nets had been thrown away by some one, and that the floats had been burned, thus depriving the party of their chief resource for food.

On the morning of the 14th, while the officers were assembled round a small fire, Perrault, one of the voyagers, presented each of them with a small piece of meat, which he had saved from his allowance. "It was received," says Franklin, "with great thankfulness, and such an act of self-denial and kindness, being totally unexpected in a Canadian voyager, filled our eyes with tears."

On the same day, Franklin, St. Germain, and Belanger, embarked in the canoe to cross the river, and when in the midst of it, the current and a strong breeze drove the canoe to the very brink of a tremendous rapid. Belanger, unluckily, applied his paddle to avert the danger of being forced down the rapid; he lost his balance, and the canoe upset in the midst of the rapid.

"We fortunately kept hold of it, until we touched a rock where the water did not reach higher than our waists; here we kept our footing, notwithstanding the strength of the current, until the water was emptied out of the canoe. Belanger then held the canoe steady whilst St. Germain placed me in it, and afterwards embarked himself in a very dexterous manner. It was impossible, however, to embark Belanger, as the canoe would have been hurried down the rapid, the moment he should have raised his foot from the rock on which he stood. We were, therefore, compelled to leave him in his perilous situation. We had not gone twenty yards before the canoe, striking on a sudden rock, went down. The place being shallow, we were again enabled to empty it, and the third attempt brought us to the shore.

"In the mean time Belanger was suffering extremely, immersed to his middle in the centre of a rapid, the upper part of his body covered with wet clothes, exposed in a temperature not much above zero, to a strong breeze. He called piteously for relief, and St. Germain on his return endeavored to embark him, but in vain. The canoe was hurried down the rapid, and when he landed he was rendered by the cold incapable of further exertion, and Adam attempted to embark Belanger, but found it impossible. An attempt was next made to carry out to him a line, made of the slings of the men's loads. This also failed, the current acting so strongly upon it, as to prevent the canoe from steering, and it was finally broken and carried down the stream. At length, when Belanger's strength seemed almost exhausted, the canoe reached him with a small cord belonging to one of the nets, and he was dragged perfectly senseless through the rapid. By

the direction of Dr. Richardson, he was instantly stripped, and being rolled up in blankets, two men undressed themselves and went to bed with him ; but it was some hours before he recovered his warmth and sensations.

“It is impossible to describe my sensations as I witnessed the various unsuccessful attempts to relieve Belanger. The distance prevented my seeing distinctly what was going on, and I continued pacing up and down upon the rock on which I landed, regardless of the coldness of my drenched and stiffening garments. The canoe, in every attempt to reach him, was hurried down the rapid, and was lost to the view amongst the rocky islets, with a rapidity that seemed to threaten certain destruction ; once, indeed, I fancied that I saw it overwhelmed in the waves. Such an event would have been fatal to the whole party. Separated as I was from my companions, without gun, ammunition, hatchet, or the means of making a fire, and in wet clothes, my doom would have been speedily sealed. My companions too, driven to the necessity of coasting the lake, must have sunk under the fatigue of rounding its innumerable arms and bays, which, as we have learned from the Indians, are very extensive. By the goodness of Providence, however, we were spared at that time, and some of us have been permitted to offer up our thanksgivings, in a civilized land, for the signal deliverances we then and afterward experienced.

“On the 20th we got into a hilly country, and the marching became much more laborious. Mr. Hood was particularly weak, and was obliged to relinquish his station of second in the line, which Dr. Richardson now took, to direct the leading man in keeping

the appointed course. I was also unable to keep pace with the men, who put forth their utmost speed, encouraged by the hope, which our reckoning had led us to form, of seeing Point Lake in the evening, but we were obliged to encamp without gaining a view of it."

On the 22d they came to a large lake and followed its coast southerly. As the wind was strong it was difficult to carry the canoe over the hills, and it got several falls, and Peltier and Vaillant, who were carrying it, finally left it behind. "The anguish this intelligence occasioned may be conceived, but it is beyond my power to describe it. Impressed, however, with the necessity of taking it forward, even in the state these men represented it to be, we urgently desired them to fetch it; but they declined going, and the strength of the officers was inadequate to the task. To their infatuated obstinacy on this occasion, a great portion of the melancholy circumstances which attended our subsequent progress may, perhaps, be attributed. The men now seemed lost to all hope of being preserved; and all the arguments we could use failed in stimulating them to the least exertion.

"After consuming the remains of the bones and horns of the deer we resumed our march, and in the evening reached a contracted part of the lake, which perceiving to be shallow, we forded and encamped on the opposite side. Heavy rain began soon afterwards, and continued all the night. On the following morning the rain had so wasted the snow, that the tracks of Mr. Back and his companions, who had gone before with the hunters, were traced with difficulty; and the frequent showers during the day almost obliterated them. The men became furious at the apprehension of being deserted by the hunters, and some of the

strongest throwing down their bundles, prepared to set out after them, intending to leave the more weak to follow as they could. The entreaties and threats of the officers, however, prevented their executing this mad scheme; but not before Solomon Belanger was despatched with orders for Mr. Back to halt until we should join him. The bounty of Providence was most seasonably manifested to us next morning, in our killing five small deer out of a herd, which came in sight as we were on the point of starting. This unexpected supply reanimated the drooping spirits of our men and filled every heart with gratitude."

On the 26th of September they reached the Coppermine River; and now for the first time the men saw their folly in refusing to bring the canoe. In hopes of finding some material for building a raft, they proceeded along the river to the east end of Point Lake where they encamped. Here Mr. Back and the interpreters were sent forward to hunt, and to communicate with the Indians supposed to be at Fort Enterprise. The balance of the party started the same day in a straggling and despondent mood. The putrid carcass of a deer which they found, furnished a supper and greatly revived the spirits of all, and they concluded to try and get across on a raft of green willows, and made one capable of holding up one man at a time.

"At this time Dr. Richardson, prompted by a desire of relieving his suffering companions, proposed to swim across the stream with a line, and to haul the raft over. He launched into the stream with the line round his middle, but when he had got a short distance from the bank, his arms became benumbed with cold, and he lost the power of moving them; still he persevered, and turning on his back, had nearly gained

the opposite bank, when his legs also became powerless, and to our infinite alarm we beheld him sink. We instantly hauled upon the line and he came again on the surface, and was gradually drawn ashore in an almost lifeless state. Being rolled up in blankets, he was placed before a good fire of willows, and fortunately was just able to speak sufficiently to give some slight directions respecting the manner of treating him. He recovered strength gradually, and by the blessing of God was enabled in the course of a few hours to converse, and by the evening was sufficiently recovered to remove into the tent. We then regretted to learn, that the skin of his whole left side was deprived of feeling in consequence of exposure to too great heat. He did not perfectly recover the sensation of that side until the following summer."

On the 1st of October, Back and the interpreters returned, having been unable to cross the water. As the willow canoe was impracticable, St. Germain proposed to build one of some painted canvas, and men were sent off to collect pitch from some small pines which had been passed on the journey.

"On the following morning the ground was covered with snow to the depth of a foot and a half, and the weather was very stormy. These circumstances rendered the men again extremely despondent; a settled gloom hung over their countenances, and they refused to pick *tripe de roche*, choosing rather to go entirely without eating, than to make any exertion. The party which went for gum returned early in the morning without having found any; but St. Germain said he could still make the canoe with the willows covered with the canvas, and removed with Adam to a clump of willows for that purpose. Mr. Back accom-

panied them to stimulate his exertion, as we feared the lowness of his spirits would cause him to be slow in his operations. Augustus went to fish at the rapid, but a large trout having carried away his bait, we had nothing to replace it.

“The snow-storm continued all the night, and during the forenoon of the 3d. Having persuaded the people to gather some *tripe de roche*, I partook of a meal with them; and afterwards set out with the intention of going to St. Germain to hasten his operations, but though he was only three-quarters of a mile distant, I spent three hours in a vain attempt to reach him, my strength being unequal to the labor of wading through the deep snow; and I returned quite exhausted, and much shaken by the numerous falls I had got. My associates were all in the same debilitated state, and poor Hood was reduced to a perfect shadow, from the severe bowel complaints which the *tripe de roche* never failed to give him. Back was so feeble as to require the support of a stick in walking; and Dr. Richardson had lameness superadded to weakness. The voyagers were somewhat stronger than ourselves, but more indisposed to exertion, on account of their despondency. The sensation of hunger was no longer felt by any of us, yet we were scarcely able to converse upon any other subject than the pleasures of eating. Hepburn, on the contrary, animated by a firm reliance on the beneficence of the Supreme Being, tempered with resignation to his will, was indefatigable in his exertions to serve us, and daily collected all the *tripe de roche* that was used in the officers' mess.

“Oct. 4.—The canoe being finished, it was brought to the encampment, and the whole party being assembled in anxious expectation on the beach, St. Germain

embarked, and amidst our prayers for his success, succeeded in reaching the opposite shore. The canoe was then drawn back again, and another person transported, and in this manner, by drawing it backwards and forwards, they were all conveyed over without any serious accident.

"That no time might be lost in procuring relief, I immediately despatched Mr. Back with St. Germain, Solomon Belanger, and Beauparlant, to search for the Indians, directing him to go to Fort Enterprise, where we expected they would be, or where, at least, a note from Mr. Wentzel would be found to direct us in our search for them. If St. Germain should kill any animals on his way, a portion of the meat was to be put up securely for us, and conspicuous marks placed over it.

"It is impossible to imagine a more gratifying change than was produced in our voyagers after we were all safely landed on the southern banks of the river. Their spirits immediately revived, each of them shook the officers cordially by the hand, and declared they now considered the worst of their difficulties over, as they did not doubt of reaching Fort Enterprise in a few days, even in their feeble condition.

"Our advance from the depth of the snow was slow. Mr. Hood, who was now very feeble, and Dr. Richardson, who attached himself to him, walked together at a gentle pace in the rear of the party. I kept with the foremost men, to cause them to halt occasionally, until the stragglers came up. We had a small quantity of this *tripe de roche* in the evening, and the rest of our supper was made up of scraps of roasted leather."

About this time two of the men, Credit and Vail.

lant, gave out, and were reported to be a mile behind, in the snow. Dr. Richardson went back and found Vaillant much exhausted with cold and hunger, but was obliged to leave him. J. B. Belanger then went to his aid and brought on his burden, but could not arouse him, and neither he nor Vaillant were seen afterwards. Junius, too, had left some days before to hunt, and never returned. The men were unable to carry their loads further, and, to relieve them and be in condition to assist any who might give out, Mr. Hood and Dr. Richardson proposed to remain behind.

"The weather was mild next morning. We left the encampment at nine, and a little before noon came to a pretty extensive thicket of small willows, near which there appeared a supply of *tripe de roche* on the face of the rocks. At this place Dr. Richardson and Mr. Hood determined to remain, with John Hepburn, who volunteered to stop with them. The tent was securely pitched, a few willows collected, and the ammunition and all other articles were deposited, except each man's clothing, one tent, a sufficiency of ammunition for the journey, and the officer's journals. I had only one blanket, which was carried for me, and two pair of shoes. The offer was now made for any of the men, who felt themselves too weak to proceed, to remain with the officers, but none of them accepted it. Michel alone felt some inclination to do so. After we had united in thanksgiving and prayers to Almighty God, I separated from my companions." This parting took place on the 7th of October, at a distance of about twenty-four miles from Fort Enterprise.

"Descending afterwards into a more level country, we found the snow very deep, and the labor of wading through it so fatigued the whole party, that we

were compelled to encamp, after a march of four miles and a half. Belanger and Michel were left far behind, and when they arrived at the encampment appeared quite exhausted. The former, bursting into tears, declared his inability to proceed with the party, and begged me to let him go back next morning to the tent, and shortly afterwards Michel made the same request. Not being able to find any *tripe de roche*, we drank an infusion of the Labrador tea plant, and ate a few morsels of burnt leather for supper. We were unable to raise the tent, and found its weight too great to carry it on; we, therefore, cut it up, and took a part of the canvas for a cover. The night was bitterly cold, and though we lay as close to each other as possible, having no shelter, we could not keep ourselves sufficiently warm to sleep. A strong gale came on after midnight, which increased the severity of the weather."

In the morning Belanger and Michel were permitted to go back, and were left sitting in the encampment. Soon afterward two of the other men Perrault and Fontano, were seized with dizziness and betrayed symptoms of extreme debility; one of them, bursting into tears, declared his inability to go on, and the other, the next day, was completely exhausted; each, at his own request, was permitted to return to Dr. Richardson's encampment, where fire and rock-tripe were to be obtained. Only one of them, however, (Michel, the Iroquois,) arrived; the other three were never heard of; and fortunate indeed would it have been if the survivor had perished with the rest. Fontano was an Italian, a faithful man, for whom Franklin had a tender regard.

The party, now reduced to five, Augustus having

gone ahead, continued the journey with no alleviation of their sufferings, excepting the comfort one day of a large fire—the first deserving the name since leaving the coast. Having no rock-tripe they drank some tea and ate some of their shoes for supper.

“At length we reached Fort Enterprise, and to our infinite disappointment found it a perfectly desolate habitation. There was no deposit of provision, no trace of the Indians, no letter from Mr. Wentzel to point out where the Indians might be found. It would be impossible for me to describe our sensations after entering this miserable abode, and discovering how we had been neglected; the whole party shed tears, not so much for our own fate, as for that of our friends in the rear, whose lives depended entirely on our sending immediate relief from this place.

“I found a note, however, from Mr. Back, stating that he had reached the house two days ago, and was going in search of the Indians, at a place where St. Germain deemed it probable they might be found. If he was unsuccessful, he purposed walking to Fort Providence, and sending succor from thence.

“We now looked round for the means of subsistence, and were gratified to find several deer skins, which had been thrown away during our former residence. The bones were gathered from the heap of ashes; these with the skins, and the addition of *tripe de roche*, we considered would support us tolerably well for a time. We procured fuel by pulling up the flooring of the other rooms, and water for the purpose of cooking by melting the snow. Whilst we were seated round the fire singeing the deer skin for supper, we were rejoiced by the unexpected entrance of Augustus. He had followed quite a different course from ours.

"In the afternoon of the 14th, Belanger arrived with a note from Mr. Back, stating that he had seen no traces of the Indians, and desiring further instructions as to the course he should pursue. Belanger's situation, however, required our first care, as he came in almost speechless, and covered with ice, having fallen into a rapid, and for the third time since we left the coast, narrowly escaped drowning." Franklin decided to start for Fort Providence, and sent by Belanger directions to Back to meet him at Rainbow Lake; but one of the men, Adam, became unable to travel, and leaving Peltier and Samandre behind with him, the other three started off alone.

"No language that I can use could adequately describe the parting scene. I shall only say there was far more calmness and resignation to the Divine will evinced by every one than could have been expected. We were all cheered by the hope that the Indians would be found by the one party, and relief sent to the other. Those who remained entreated us to make all the haste we could."

Franklin was unable to keep up with his companions, and leaving them to go on alone, returned to the house, where he found the men much dispirited and failing, two of them being unable to leave their beds.

"We perceived our strength decline every day, and every exertion began to be irksome; when we were once seated the greatest effort was necessary in order to rise, and we had frequently to lift each other from our seats; but even in this pitiable condition we conversed cheerfully, being sanguine as to the speedy arrival of the Indians. Having expended all the wood which we could procure from our present dwelling, without endangering its falling, Peltier began this

day to pull down the partitions of the adjoining houses.

“On the 29th, Peltier felt his pains more severe and could only cut a few pieces of wood. Samandre, who was still almost as weak, relieved him a little time, and I assisted them in carrying in the wood. We saw a herd of reindeer sporting on the river, about half a mile from the house; they remained there a considerable time, but none of the party felt themselves sufficiently strong to go after them, nor was there one of us who could have fired a gun without resting it.

“Whilst we were seated round the fire this evening, discoursing about the anticipated relief, the conversation was suddenly interrupted by Peltier’s exclaiming with joy, “*Ah! le monde!*” imagining that he heard the Indians in the other room; immediately afterwards, to his bitter disappointment, Dr. Richardson and Hepburn entered, each carrying his bundle. Peltier, however, soon recovered himself enough to express his joy at their safe arrival, and his regret that their companions were not with them. When I saw them alone my own mind was instantly filled with apprehensions respecting my friend Hood, and our other companions, which were immediately confirmed by the Doctor’s melancholy communication, that Mr. Hood, and Michel were dead. Perrault and Fontano had neither reached the tent nor been heard of by them.

“Hepburn having shot a partridge, which was brought to the house, the Doctor tore out the feathers, and having held it to the fire a few minutes, divided it into seven portions. Each piece was ravenously devoured by my companions, as it was the first morsel of flesh any of us had tasted for thirty-one days, un-

less indeed the small gristly particles which we found occasionally adhering to the pounded bones may be termed flesh. Our spirits were revived by this small supply, and the Doctor endeavored to raise them still higher by the prospect of Hepburn's being able to kill a deer next day, as they had seen, and even fired at, several near the house. Having brought his prayer-book and Testament, some prayers and psalms, and portions of scripture, appropriate to our situation, were read, and we retired to bed.

"Next morning the Doctor and Hepburn went out early in search of deer; but, though they saw several herds and fired some shots, they were not so fortunate as to kill any, being too weak to hold their guns steadily. The cold compelled the former to return soon, but Hepburn persisted until late in the evening.

"After our usual supper of singed skin and bone soup, Dr. Richardson acquainted me with the afflicting circumstances attending the death of Mr. Hood and Michel and detailed occurrences subsequent which I shall give from his journal in his own words."

CHAPTER XV.
FRANKLIN'S FIRST LAND EXPEDITION,
(CONTINUED.)

DR. RICHARDSON'S NARRATIVE.

"AFTER Captain Franklin had bidden us farewell, we remained seated by the fireside as long as the willows, the men had cut for us before they departed, lasted. We had no *tripe de roche* that day, but drank an infusion of the country tea-plant, which was grateful from its warmth, although it afforded no sustenance. We then retired to bed, where we remained all the next day, as the weather was stormy, and the snow-drift so heavy, as to destroy every prospect of success in our endeavors to light a fire with the green and frozen willows, which were our only fuel. Through the extreme kindness and forethought of a lady, the party, previous to leaving London, had been furnished with a small collection of religious books, of which we still retained two or three of the most portable, and they proved of incalculable benefit to us. We read portions of them to each other as we lay in bed, in addition to the morning and evening service, and found that they inspired us on each perusal with so strong a sense of the omnipresence of a beneficent God, that our situation, even in these wilds, appeared no longer destitute; and we conversed, not only with calmness,

but with cheerfulness, detailing, with unrestrained confidence the past events of our lives, and dwelling with hope on our future prospects. Had my poor friend been spared to revisit his native land, I should look back to this period with unalloyed delight.

“On the morning of October 9th, the weather, although still cold; was clear, and I went out in quest of *tripe de roche*, leaving Hepburn to cut willows for a fire, and Mr. Hood in bed. I had no success, as yesterday's snow drift was so frozen on the surface of the rocks that I could not collect any of the weed; but, on my return to the tent, I found that Michel, the Iroquois, had come with a note from Mr. Franklin. Michel informed us that he quitted Mr. Franklin's party yesterday morning, but, that having missed his way, he had passed the night on the snow a mile or two to the northward of us. Belanger, he said, being impatient, had left the fire about two hours' earlier, and as he had not arrived, he supposed he had gone astray. It will be seen in the sequel, that we had more than sufficient reason to doubt the truth of this story.

“Michel now produced a hare and a partridge which he had killed in the morning. This unexpected supply of provision was received by us with a deep sense of gratitude to the Almighty for his goodness, and we looked upon Michel as the instrument he had chosen to preserve all our lives. He complained of cold, and Mr. Hood offered to share his buffalo robe with him at night: I gave him one of two shirts which I wore, whilst Hepburn, in the warmth of his heart, exclaimed, ‘How I shall love this man if I find that he does not tell lies like the others.’ Our meals being finished, we arranged that the greatest part of the things should

be carried to the pines the next day ; and after reading the evening service, retired to bed full of hope.

“Early in the morning Hepburn, Michel, and myself, carried the ammunition, and most of the other heavy articles to the pines. Michel was our guide, and it did not occur to us at the time that his conducting us perfectly straight was incompatible with his story of having gone astray on his way to us. He now informed us that he had, on his way to the tent, left on the hill above the pines a gun and forty-eight balls, which Perrault had given him when with the rest of Mr. Franklin's party, he took leave of him. It will be seen, on a reference to Mr. Franklin's journal, that Perrault carried his gun and ammunition with him when they parted from Michel and Belanger. After we had made a fire, and drank a little of the country tea, Hepburn and I returned to the tent, where we arrived in the evening, much exhausted with our journey. Michel preferred sleeping where he was, and requested us to leave him the hatchet, which we did, after he had promised to come early in the morning to assist us in carrying the tent and bedding. Mr. Hood remained in bed all day. Seeing nothing of Belanger to-day, we gave him up for lost.

“On the 11th, after waiting until late in the morning for Michel, who did not come, Hepburn and I loaded ourselves with the bedding, and accompanied by Mr. Hood, set out for the pines. Mr. Hood was much affected with dimness of sight, giddiness, and other symptoms of extreme debility, which caused us to move very slow, and to make frequent halts. On arriving at the pines, we were much alarmed to find that Michel was absent. We feared that he had lost his way in coming to us in the morning, although it

was not easy to conjecture how that could have happened, as our footsteps of yesterday were very distinct. Hepburn went back for the tent, and returned with it after dusk, completely worn out with the fatigue of the day. Michel, too, arrived at the same time, and relieved our anxiety on his account. He reported that he had been in chase of some deer which passed near his sleeping-place in the morning, and although he did not come up with them, yet that he found a wolf which had been killed by the stroke of a deer's horn, and had brought a part of it. We implicitly believed this story then, but afterwards became convinced from circumstances, the detail of which may be spared, that it must have been a portion of the body of Belanger or Perrault.

"A question of moment here presents itself; namely, whether he actually murdered these men, or either of them, or whether he found the bodies on the snow. Captain Franklin conjectures, that Michel having already destroyed Belanger, completed his crime by Perrault's death, in order to screen himself from detection.

"On the following morning the tent was pitched, and Michel went out early, refused my offer to accompany him, and remained out the whole day. He would not sleep in the tent that night, but chose to lie at the fireside.

"On the 13th there was a heavy gale of wind, and we passed the day by the fire. Next day, about two P. M., the gale abating, Michel set out as he said to hunt, but returned unexpectedly in a very short time. This conduct surprised us, and his contradictory and evasory answers to our questions excited some suspicions, but they did not turn towards the truth.

"October 15th.—In the course of this day Michel expressed much regret that he had staid behind Mr. Franklin's party, and declared that he would set out for the house at once if he knew the way. We endeavored to soothe him, and to raise his hopes of the Indians speedily coming to our relief, but without success.

"Next day he refused either to hunt or cut wood, spoke in a very surly manner, and threatened to leave us. Under these circumstances, Mr. Hood and I deemed it better to promise if he would hunt diligently for four days, that then we would give Hepburn a letter for Mr. Franklin, a compass, inform him what course to pursue, and let them proceed together to the fort.

"On the 17th I went to conduct Michel to where Vaillant's blanket was left, and after walking about three miles, pointed out the hills to him at a distance. He proposed to remain out all night, and to hunt next day on his way back. He returned in the afternoon of the 18th, having found the blanket, together with a bag containing two pistols, and some other things which had been left beside it. We had some *tripe de roche*, in the evening, but Mr. Hood, from the constant griping it produced, was unable to eat more than one or two spoonfuls. He was now so weak as to be scarcely able to sit up at the fireside, and complained that the least breeze of wind seemed to blow through his frame. He also suffered much from cold during the night.

"On the 19th Michel refused to hunt, or even to assist in carrying a log of wood to the fire, which was too heavy for Hepburn's strength and mine. Mr. Hood endeavored to point out to him the necessity and duty of exertion, and the cruelty of his quitting

us without leaving something for our support ; but the discourse, far from producing any beneficial effect, seemed only to excite his anger, and amongst other expressions he made use of the following remarkable one : “ It is no use hunting, there are no animals, you had better kill and eat me.”

“ *October 20.*—In the morning we again urged Michel to go a hunting, that he might if possible leave us some provision, to-morrow being the day appointed for his quitting us ; but he showed great unwillingness to go out, and lingered about the fire, under the pretense of cleaning his gun. After we had read the morning service, I went about noon to gather some *tripe de roche*, leaving Mr. Hood sitting before the tent at the fireside, arguing with Michel ; Hepburn was employed cutting down a tree at a short distance from the tent, being desirous of accumulating a quantity of fire-wood before he left us. A short time after I went out, I heard the report of a gun, and about ten minutes afterwards Hepburn called to me in a voice of great alarm, to come directly. When I arrived, I found poor Hood lying lifeless at the fireside, a ball having apparently entered his forehead. I was at first horror-struck with the idea, that in a fit of despondency he had hurried himself into the presence of his almighty Judge, by an act of his own hand ; but the conduct of Michel soon gave rise to other thoughts, and excited suspicions which were confirmed when upon examining the body, I discovered that the shot had entered the back part of the head, and passed out at the forehead, and that the muzzle of the gun had been applied so close as to set fire to the night-cap behind. The gun, which was of the longest kind supplied to the Indians, could not have been placed

in a position to inflict such a wound, except by a second person.

“Upon inquiring of Michel how it happened, he replied, that Mr. Hood had sent him into the tent for a short gun, and that during his absence the long gun had gone off, he did not know whether by accident or not. He held the short gun in his hand at the time he was speaking to me. Hepburn afterwards informed me, that previous to the report of the gun, Mr Hood and Michel were speaking to each other in an elevated, angry tone; that Mr. Hood being seated at the fireside, was hid from him by intervening willows, but that on hearing the report he looked up, and saw Michel rising up from before the tent door, or just behind where Mr. Hood was seated, and then going into the tent. Thinking that the gun had been discharged for the purpose of cleaning it, he did not go to the fire at first; and when Michel called to him that Mr. Hood was dead, a considerable time had elapsed. Although I dared not openly to evince any suspicion that I thought Michel guilty of the deed, yet he repeatedly protested that he was incapable of committing such an act, kept constantly on his guard, and carefully avoided leaving Hepburn and me together. He was evidently afraid of permitting us to converse in private, and whenever Hepburn spoke, he inquired if he accused him of the murder.

“We removed the body into a clump of willows behind the tent, and, returning to the fire, read the funeral service in addition to the evening prayers. The loss of a young officer, of such distinguished and varied talents and application, may be felt and duly appreciated by the eminent characters under whose command he had served; but the calmness with which

he contemplated the probable termination of a life of uncommon promise; and the patience and fortitude with which he sustained, I may venture to say, unparalleled bodily sufferings, can only be known to the companions of his distresses. *Bickersteth's Scripture Help* was lying open beside the body, as if it had fallen from his hand, and it is probable that he was reading it at the instant of his death.

"We passed the night in the tent together without rest, every one being on his guard.

"Next day, having determined on going to the Fort, we began to patch and prepare our clothes for the journey. We singed the hair off a part of the buffalo robe that belonged to Mr. Hood, and boiled and ate it. Michel tried to persuade me to go to the woods on the Coppermine River, and hunt for deer, instead of going to the Fort. In the afternoon a flock of partridges coming near the tent, he killed several, which he shared with us.

"Thick snowy weather and a head wind prevented us from starting the following day, but on the morning of the 23d we set out, carrying with us the remainder of the singed robe. Hepburn and Michel had each a gun, and I carried a small pistol, which Hepburn had loaded for me. In the course of the march, Michel alarmed us much by his gestures and conduct, was constantly muttering to himself, expressed an unwillingness to go to the Fort, and tried to persuade me to go to the southward to the woods, where he said he could maintain himself all the winter by killing deer. In consequence of this behavior, and the expression of his countenance, I requested him to leave us and to go to the southward by himself. This proposal increased his ill-nature, he threw out some

obscure hints of freeing himself from all restraint on the morrow; and I overheard him muttering threats against Hepburn, whom he openly accused of having told stories against him. He also for the first time, assumed such a tone of superiority in addressing me, as evinced that he considered us to be completely in his power, and he gave vent to several expressions of hatred towards the white people, or as he termed us in the idiom of the voyagers, the French, some of whom, he said, had killed and eaten his uncle and two of his relations.

“In short, taking every circumstance of his conduct into consideration, I came to the conclusion, that he would attempt to destroy us on the first opportunity that offered, and that he had hitherto abstained from doing so from his ignorance of the way to the Fort, but that he would never suffer us to go thither in company with him. Hepburn and I were not in a condition to resist even an open attack, nor could we by any device escape from him. Our united strength was far inferior to his, and, beside his gun, he was armed with two pistols, an Indian bayonet, and a knife. In the afternoon, coming to a rock on which there was some *tripe de roche*, he halted, and said he would gather it whilst we went on, and that he would soon overtake us.

“Hepburn and I were now left together for the first time since Mr. Hood's death, and he acquainted me with several material circumstances which he had observed of Michel's behavior, and which confirmed me in the opinion that there was no safety for us except in his death, and he offered to be the instrument of it. I determined, however, as I was thoroughly convinced of the necessity of such a dreadful act, to

take the whole responsibility upon myself; and immediately upon Michel's coming up, I put an end to his life by shooting him through the head with a pistol. Had my own life alone been threatened, I would not have purchased it by such a measure; but I considered myself as intrusted also with the protection of Hepburn's, a man, who, by his humane attentions and devotedness, had so endeared himself to me, that I felt more anxiety for his safety than for my own. Michel had gathered no *tripe de roche*, and it was evident to us that he had halted for the purpose of putting his gun in order, with the intention of attacking us, perhaps, whilst we were in the act of encamping.

"I have dwelt in the preceding part of the narrative upon many circumstances of Michel's conduct, not for the purpose of aggravating his crime, but to put the reader in possession of the reasons that influenced me in depriving a fellow creature of life. Up to the period of his return to the tent, his conduct had been good and respectful to the officers, and in a conversation between Captain Franklin, Mr. Hood, and myself, at Obstruction Rapid, it had been proposed to give him a reward upon our arrival at a post. His principles, however, unsupported by a belief in the divine truths of Christianity, were unable to withstand the pressure of severe distress. His countrymen, the Iroquois, are generally Christians, but he was totally uninstructed and ignorant of the duties inculcated by Christianity; and from his long residence in the Indian country, seems to have imbibed, or retained, the rules of conduct which the southern Indians prescribe to themselves

"On the two following days we had mild but thick snowy weather, and as the view was too limited to

enable us to preserve a straight course, we remained encamped amongst a few willows and dwarf pines, about five miles from the tent. On the 26th, the weather being clear and extremely cold, we resumed our march, which was very painful from the depth of the snow, particularly on the margins of the small lakes that lay in our route. We frequently sunk under the load of our blankets, and were obliged to assist each other in getting up.

"We came in sight of the fort at dusk on the 29th, and it is impossible to describe our sensations, when on attaining the eminence that overlooks it, we beheld the smoke issuing from one of the chimneys. From not having met with any footsteps in the snow, as we drew nigh our once cheerful residence, we had been agitated by many melancholy forebodings. Upon entering the now desolate building, we had the satisfaction of embracing Captain Franklin, but no words can convey an idea of the filth and wretchedness that met our eyes on looking around. Our own misery had stolen upon us by degrees, and we were accustomed to the contemplation of each other's emaciated figures, but the ghastly countenances, dilated eye-balls, and sepulchral voices of Mr. Franklin and those with him, were more than we could at first bear."

THE morning of October 31st was very cold, and matters did not improve at Fort Enterprise. Attempts to kill deer and partridges were unsuccessful, and Peltier and Samandre grew weaker; within two days both were dead.

On the 7th of November, the report of a musket was heard, and three Indians were seen close to the

house. Relief had arrived at last; Adams was in so weak a state that he could hardly comprehend it, but on taking food he rapidly improved.

"The Indians had left Akaitcho's encampment on the 5th of November, having been sent by Mr. Back with all possible expedition, after he had arrived at their tents. They brought but a small supply of provisions, that they might travel quickly. Boudel-kell, the youngest of the Indians, after resting about an hour, returned to Akaitcho with the intelligence of our situation. The two others, "Crooked Foot and the Rat," remained to take care of us. They set about everything with an activity that amazed us."

On the 13th, the Indians became despondent at the non-arrival of supplies, and in the evening went off after giving each of the white men a handful of pounded meat. On the 15th, Crooked Foot and two other Indians appeared, with two Indian women dragging provisions.

On the 16th of November the travelers started towards Fort Providence, escorted by the Indians, who treated their charge with the greatest tenderness, preparing their encampment and cooking for them. On the 26th they arrived safely at the abode of Akaitcho, and were received by the Indians in his tent with looks of compassion and profound silence of fifteen minutes duration, whereby they meant to express their condolence. Nothing was said until after the white men had tasted food.

On the 8th of December, Franklin and Richardson took leave of Akaitcho and started south, conducted by Belanger and a Canadian who had been sent for them with sledges drawn by dogs. They arrived at Fort Providence on the 11th, and were there visited

by Akaitcho and his band, with Adam, who had united with them. In the course of conversation Akaitcho said to Franklin, "I know you write down every occurrence in your books; but probably you have only noticed the bad things we have said and done, and omitted to mention the good."

Starting southward again, the party reached Moose-Deer Island on the 17th, where they found Mr. Back, who gave an affecting detail of the proceedings of his party since the separation. His narrative is but a continuation of the same kind of suffering by famine and cold. For days they had nothing to eat, and one of his men, Beauparlant, died on the way.

On the 26th of May, after a five months' residence at Moose-Deer Island, the party started for Fort Chipewyan, where they met Mr. Wentzel; his excuse for failing to keep a supply of provisions at Fort Enterprise was that he could not control the Indians.

Franklin, Richardson, and Augustus arrived at Fort York on the 14th of July 1822. And thus terminated their long, fatiguing, and disastrous travels in North America, having journeyed by water and by land (including their navigation of the Polar Sea,) five thousand five hundred and fifty miles.

A STATION OF THE HUDSON'S BAY COMPANY.

CHAPTER XVI.

FRANKLIN'S SECOND LAND EXPEDITION.

In July 1825, Captain Franklin and his party, which included his old companions Messrs. Richardson and Back, arrived at Fort Chipewyan on his second expedition to the northern shores of America. In due time the whole party assembled on the banks of the Great Bear Lake River, which flows out of that lake on the western side into the Mackenzie River, down which they were to descend to the sea in the following summer.

On the 8th of August, Franklin embarked in the "Lion" for a preliminary trip down the Mackenzie. Back with three canoes accompanied him. Near a place called the "Ramparts" they fell in with a party of Hare Indians all neatly clothed in new leathern dresses, highly ornamented with beads and porcupine quills, both sexes alike, who brought fish, berries and meat. At Fort Good Hope, the lowest of the fur establishments, Charles Dease, chief trader of the company, received the travelers and prepared a meal for them at midnight. This fort was situated among the Indians whom Mackenzie called Quarrelers, but whom the traders named Loucheux or Squinters.

Continuing on, the party came to what they supposed to be the Arctic Sea, and on Garry Island a tent

was pitched, and the flag which Franklin's deeply lamented wife had given him on parting, to be unfurled only in view of this sea, was hoisted.

During Franklin's absence on this trip suitable buildings were erected and named Fort Franklin, and here the adventurers remained through the winter, which though severe was passed in comparative comfort. The last swan flew to the south on the 5th of October, and the first one re-appeared on the 6th of May. Mosquitoes arrived on the 24th of May, and the first flower was gathered on the 27th.

The boats were launched on the 15th of June, and the men appointed to their respective stations and furnished with blue water-proof uniforms and feathers. The day was closed by drinking a small quantity of rum reserved for the occasion, followed by a merry dance in which all joined.

The adventurers left Fort Franklin on the 21st of June, leaving behind in charge of the fort only an old fisherman, who would not let them depart without giving his hearty though solitary cheer, which was returned in full chorus. Early in July they reached a broad part of the river where different channels branch off, and here the party divided. Franklin and Back in the *Lion* and *Reliance* took the western channel, and Richardson with two other boats took the easterly one.

On the 7th of July Franklin's party reached the mouth of the river, and discovered on an island a multitude of tents and many Esquimaux. Articles for presents and trade having been selected, the boats sailed toward the tents with the ensigns flying, but touched ground when about a mile from the beach. Three kayaks instantly put off from the shore and others quickly followed, so that the whole space

between the island and the boats was covered with them. The leading kayaks were paddled by elderly men, whom Augustus invited to approach and receive a present, telling them that if a channel for ships were found they would come and open a trade. On hearing which they shouted for joy.

A trade was now commenced and three hundred natives crowded around the boats, anxious to sell their bows, arrows, and spears, and although their importunities were troublesome, they showed no unfriendly disposition until an accident occurred which was productive of annoying consequences.

"A kayak being overset by one of the Lion's oars, its owner was plunged into the water with his head in the mud, and apparently in danger of being drowned. We instantly extricated him from his unpleasant situation, and took him into the boat until the water could be thrown out of his kayak; and Augustus, seeing him shivering with cold, wrapped him up in his own great-coat. At first he was exceedingly angry, but soon became reconciled to his situation; and, looking about, discovered that we had many bales and other articles in the boat, which had been concealed from the people in the kayaks, by the coverings being carefully spread over all. He soon began to ask for everything he saw, and expressed much displeasure on our refusing to comply with his demands; he also, as we afterwards learned, excited the cupidity of others by his account of the inexhaustible riches in the Lion, and several of the younger men endeavored to get into both our boats, but we resisted all their attempts."

Meantime the water having ebbed so that it was only knee deep where the boats lay, the natives seized

the *Reliance* and dragged it to the beach. Franklin, who was in the *Lion*, says:—

“Two of the most powerful men, jumping on board at the same time, seized me by the wrists and forced me to sit between them; and as I shook them loose two or three times, a third Esquimaux took his station in front to catch my arm whenever I attempted to lift my gun, or the broad dagger which hung by my side. The whole way to the shore they kept repeating the word ‘*teyma*,’ beating gently on my left breast with their hands, and pressing mine against their breasts. As we neared the beach, two oomiaks full of women arrived, and the ‘*teymas*’ and vociferation were redoubled. The *Reliance* was first brought to the shore, and the *Lion* close to her a few seconds afterward. The three men who held me now leaped ashore, and those who had remained in their canoes, taking them out of the water, carried them to a little distance. A numerous party then drawing their knives, and stripping themselves to the waist, ran to the *Reliance*, and, having first hauled her as far up as they could, began a regular pillage, handing the articles to the women, who, ranged in a row behind, quickly conveyed them out of sight.”

In short, after a furious contest for possession of the goods, during which knives were brandished in a most threatening manner, several of the men’s clothes cut through, and the buttons of others torn from their coats, Lieutenant Back ordered his men to seize and level their muskets, but not to fire till the word was given. This had the desired effect, the whole crowd taking to their heels and hiding themselves behind the drift-timber on the beach. Franklin still thought it best to temporize so long as the boats were lying.

aground, and states his conviction, "considering the state of excitement to which they had worked themselves, that the first blood which his party might unfortunately have shed would instantly have been revenged by the sacrifice of all their lives."

The boats floated soon afterwards, and as they were leaving, some of the natives walked along the beach and invited Augustus to a conference on shore. "I was unwilling to let him go," says Franklin, "but the brave little fellow entreated so earnestly that I would suffer him to land and reprove the Esquimaux for their conduct, that I at length consented." On his return, being desired to tell what he said to them, "he had told them," he said,

"Your conduct has been very bad, and unlike that of all other Esquimaux. Some of you even stole from me, your countryman; but that I do not mind; I only regret that you should have treated in this violent manner the white people, who came solely to do you a kindness. My tribe were in the same unhappy state in which you now are before the white people came to Churchill, but at present they are supplied with everything they need, and you see that I am well clothed; I get all that I want, and am very comfortable. You cannot expect, after the transactions of this day, that these people will ever bring goods to your country again, unless you show your contrition by restoring the stolen goods. The white people love the Esquimaux, and wish to show them the same kindness that they bestow upon the Indians. Do not deceive yourselves, and suppose they are afraid of you; I tell you they are not; and that it is entirely owing to their humanity that many of you were not killed to-day; for they have all guns, with which they can

destroy you either when near or at a distance. I also have a gun, and can assure you that if a white man had fallen I would have been the first to have revenged his death."

In reply, the natives said that having never seen white men before they could not resist the temptation of stealing their pretty things; they promised never to do the like again, and gave a proof of their sincerity by restoring the articles that had been stolen; and thus, in an amicable manner, was the affray concluded.

On the 13th of July, Franklin started to examine the sea coast westerly of the Mackenzie River, and discovered on the 27th, the mouth of another large river which he named the Clarence. The extreme westerly point reached by the party was called Return Reef, near longitude 149°. From this place they started to return on the 18th of August. At this same time, as was subsequently ascertained, a boat party from Beechy's Behring's Strait expedition, was only one hundred and sixty miles west of them on the same coast.

Franklin and his party reached Fort Franklin in safety on the 21st of September, after traveling in three months two thousand and forty-eight miles. Here they found Dr. Richardson and his party, who had sailed eastward from the mouth of the Mackenzie River to the mouth of the Coppermine, and thence overland to the rendezvous, making altogether a journey of one thousand nine hundred and eighty miles.

A second winter, and an intensely cold one, was passed pleasantly at Fort Franklin. At this same time Captain Parry was wintering amid the ice at a

point further north, as related in former chapters. It chanced that the magnetic pole lay at this time between them. "For the same months," says Franklin, "at the interval of only one year, Captain Parry and myself were making hourly observations on two needles, the north ends of which pointed almost directly towards each other, though our actual distance apart did not exceed eight hundred and fifty-five geographical miles; and while the needle of Port Bowen was increasing its westerly direction, ours was increasing its easterly, and the contrary—the variation being west at Port Bowen, and east at Fort Franklin—a beautiful and satisfactory proof of the solar influence on the daily variation."

When spring opened Franklin and his companions started southward, and arrived in London in September.

CHAPTER XVII.

ARCTIC VOYAGES OF SCORESBY, CLAVERING AND SABINE, LYONS, AND BEECHEY.

It must not be forgotten that while we are greatly indebted to scientific and amateur discoverers for our knowledge of the Arctic regions, we are also under obligations to practical seamen ; and among them no one has shown more zeal and intelligence than Capt., afterwards Dr., Scoresby. This gentleman, bred and reared, as it were, amid the tempests and snows of the North, and inheriting the love of adventure from his father who was also a captain in the whale service and gave his son a marine education, observed the phenomena of the Northern seas, with an enquiring and scientific eye unusual among those who pursue the rough life of a whaler.

In 1806, Capt. Scoresby, then acting as mate under his father who commanded a Greenland ship, made a nearer approach to the North Pole than had hitherto been fully authenticated ; for the statements of the Dutch and other navigators who boast of having gone much nearer, are subject to great doubt as to the correctness of their observations.

Proceeding by Jan Mayen into the whale-bight, they found the waters encumbered by much broken

ice, through which they made their way into an open sea so extensive that its termination could not be discovered, but was estimated to extend four or five hundred square leagues. Advancing northward, they arrived at a very close continuous field of bay-ice, compacted by drifting fragments. Pushing their way through this by the most laborious exertions, they succeeded in reaching another open sea, unbounded, except by ice on the south and land in the distant east.

As their object was to catch whales, and not to visit the Pole, they sailed in a north-west direction, swiftly crossing the short meridians of this parallel, and soon passed from the tenth degree of east to the eighth of west longitude. Their latitude was $79^{\circ}.35'$, and the sea was still open on every side. As they found no whales, they changed their tack, and ran east-north-east about three hundred miles, till they came to the nineteenth degree of east longitude and to latitude $81^{\circ}.30'$ —only about five hundred geographical miles from the Pole. The sea lay open before them, and it was a great temptation to the young and daring sailor to run up and hang his cap on the North Pole; but the father, prudently considering that he had been fitted out by a mercantile concern to bring home a cargo of whale oil, decided not to gratify the ambition of his son, and turned backwards to Hakluyt's Headland, where he was rewarded for his fidelity to his employers by catching twenty-four whales, from which were extracted two hundred and sixteen tons of oil.

Capt. Scoresby, the younger, afterwards had abundant opportunity to gratify his love of adventure. In 1817 he made an excursion on Jan Mayen's Island.

The most striking feature was the mountain Beerenberg, which rears its head 6870 feet above the sea; and, being seen to the distance of thirty or forty leagues, proves a conspicuous landmark to the mariner. The first objects which attracted the eye were three magnificent icebergs, which rose to a very great height, stretching from the base of Beerenberg to the water's edge. Their usual greenish-gray color, diversified by snow-white patches resembling foam, and with black points of rock jutting out from the surface, gave them exactly the appearance of immense cascades, which in falling had been fixed by the power of frost.

A party ascended a mountain which composed only the base of Beerenberg, yet was itself 1500 feet high. They were not long in discovering that the materials composing this eminence were entirely volcanic. They trod only upon ashes, slag, baked clay, and scorix; and whenever these substances rolled under their feet, the ground beneath made a sound like that of empty metallic vessels or vaulted caverns. On the summit they discovered a spacious crater, about 600 feet deep, and 700 yards in diameter, the bottom of which was filled with alluvial matter, and which, being surrounded by rugged walls of red clay half-baked, had the appearance of a spacious castle. A spring of water penetrated its side by a subterranean cavern, and disappeared in the sand. No attempt was made to ascend Beerenberg, which towered in awful grandeur, white with snow, above the region of the clouds; but at its feet was seen another crater surrounded by an immense accumulation of castellated lava. A large mass of iron was found, that had been smelted by the interior fires. The volcano was at this time entirely

silent, but the next year Scoresby saw smoke arising from it to a great height.

In 1818 he landed near Mitre Cape, and undertook to reach the summit of the singularly insulated cliff of which it consists. Much of the ascent was over fragments of rock so loose that the foot in walking slid back every step. At one place the party found a ridge so steep that Scoresby could seat himself across it as on the back of a horse. They reached the summit, estimated as 3000 feet high, about midnight when the sun still shone on its snow-capped pinnacle, causing such a rapid melting that streams of water were flowing around them.

The view from this summit is described by Scoresby as equally grand, extensive, and beautiful. On the east side were two finely-sheltered bays, while the sea, unruffled by a single breeze, formed an immense expanse to the west. The icebergs reared their fantastic forms almost on a level with the summits of the mountains, whose cavities they filled, while the sun illumined, but could not dissolve them. The valleys were enamelled with beds of snow and ice, one of which extended beyond reach of the eye. In the interior, mountains rose beyond mountains till they melted into distance. The cloudless canopy above, and the position of the party themselves, on the pinnacle of a rock surrounded by tremendous precipices, conspired to render their situation equally singular and sublime. If a fragment was detached, either spontaneously or by design, it bounded from rock to rock, raising smoke at every blow and setting numerous other fragments in motion, till, amid showers of stones, it reached the bottom of the mountain.

The descent of the party was more difficult and

perilous than the ascent. The stones sunk beneath their steps and rolled down the mountain, and they were obliged to walk abreast; otherwise the foremost might have been overwhelmed under the masses which those behind him dislodged. Finally, to the astonishment and alarm of the sailors beneath, Scoresby and his companions, in a part of their descent, slid down an almost perpendicular wall of ice, and arrived in safety at the ships. The beach was found nearly covered with the nests of terns, ducks, and other tenants of the Arctic air, in some of which there were young, over whom the parents kept watch, and, by loud cries and vehement gestures, sought to defend them against the gulls and other predatory tribes hovering around. Several sailors who had robbed these nests were followed to a considerable distance with loud and violent screams.

In a subsequent whaling voyage along the coast of Greenland in the good ship *Baffin*, Scoresby made some important geographical discoveries, and his attention was particularly attracted to the refractive power of the Polar atmosphere when acting on ice and other objects discerned through its medium. The rugged surface assumed the forms of castles, obelisks, and spires, which here and there were sometimes so linked together as to present the semblance of an extensive and crowded city. At other times it resembled a forest of naked trees; and fancy scarcely required an effort to identify its varieties with the productions of human art;—sculptured colossal forms, porticoes of rich and regular architecture,—even with the shapes of lions, bears, horses, and other animals. Ships were seen inverted, and suspended high in the air, and their hulls often so magnified as to resemble huge

edifices. Objects really beneath the horizon were raised into view in a most extraordinary manner. It seems positively ascertained, that points in the coast of Greenland not above 4000 feet high, were seen at the distance of 160 miles. The extensive evaporation of the melting ices, with the unequal condensation produced by streams of cold air, are considered by Mr. Scoresby as the chief sources of this extraordinary refraction.

The coasts of Greenland were found richer in plants and verdure than any others seen by our navigator within the Arctic circle, and almost deserving the name given to the country by its first discoverers. The grass run in one place to one foot in height, and there were meadows of several acres that appeared nearly equal to any in England. Nowhere was a human being seen, but there were traces of recent and frequent habitations, not constructed of snow slabs like those of the Esquimaux, but dug deep in the ground, entered by a long winding passage, and roofed with a wooden frame overlaid with moss and earth. Near the hamlets were excavations in the earth, serving as graves, where implements of hunting, found along with the bones of the deceased, proved the prevalence here of the general belief of savage nature, that the employments of man in the future life will exactly resemble those of the present.

Our navigator would have been happy to examine more of the Greenland coast, but the ship was not his own, and the object of his voyage being to catch whales, he was compelled to turn in another direction.

Scoresby's discoveries and observations are appropriately followed by those of Captains Edward Sabine and D. C. Clavering, which were made more in

behalf of science than geographical discovery. Sabine had long been interested in philosophical experiments on the shape of the earth by means of the pendulum, and under the patronage of the English Government had visited Sierra Leone, St. Thomas, Trinidad and other West India islands, and also New York, in the ship Pheasant commanded by Clavering. So congenial was the society of these two gentlemen, that when it was proposed to Sabine to extend his observations into the Polar regions, he requested that Clavering might command the gun-brig, Griper, which had been designated to convey him northward; and he did so. The Griper sailed from the Nore, May 11th, 1823, being duly furnished with the magnetic pendulum and various astronomical and scientific instruments.

The first destination of the Griper was Hammerfest, near the North Cape of Norway, where she arrived on the 23d of June. This place, built on a small island named Qualoen, is in latitude $70^{\circ}40'$, and the dip of the needle here Capt. Sabine found to be $77^{\circ}40'$. Hammerfest was only a hamlet containing some dozen houses, and our travelers were much pleased with the simple manners and kind hospitality of the people, who were delighted with the idea of a visit from a man-of-war, even if it was no larger than the little Griper. The women were fair and pretty and dressed much like English women. Remote from the fashionable world, they were untainted with either its vices or follies. Religious influences controlled the hamlet and deviations from the rules of morality were exceedingly rare. The trade of the place was entirely in fish and oil, and reindeer the sole animal.

Having finished his observation at Hammerfest,

Sabine embarked on the 23d of June for Spitzbergen and vicinity, and on the 30th anchored abreast of a small island, one of the inner Norways, and disembarked the tents and instruments. While Sabine was making his observations here, Clavering determined to sail northward—to the North Pole if possible,—to see what he could see in the high latitudes.

Accordingly, leaving six men to assist Sabine, and six months' provisions and fuel so that if anything should happen to the Griper the philosopher might not starve or freeze, and a launch in which he might make his way back to Hammerfest, the brave sailor steered due north on the 5th of July, with the North Pole for his destination. After sailing twenty-five miles he found himself embayed among ice. Proceeding cautiously, he struck on the 6th a field of packed ice extending east and west as far as the eye could reach. Skirting the margin of this field in a line nearly west for sixty miles and perceiving no appearance of an opening, he concluded it would be useless to make further attempt to reach the Pole in this region, and accordingly returned to Capt. Sabine on the 11th of July. The highest latitude reached by Clavering was $80^{\circ}20'$.

The magnetic pendulum having swung to the satisfaction of the philosopher and all due observations having been taken of the stars, the Griper was stored with fifty reindeer for fresh provisions, and headed for Gael Hamkes' Bay, the highest point known on the eastern coast of Greenland, which they reached, after many impediments from ice on the 8th of August. A boat was sent on shore at a point which they called Cape Warren, "than which," Clavering says, "never was there a more desolate spot seen. Spitzbergen was a paradise to this place."

Proceeding along the coast to the northward, among floes of ice, they discovered two islands which they named Pendulum Islands. Having passed them, Clavering advanced northward till blocked by ice in latitude $75^{\circ}12'$. He had now reached what he conceived to be the north-east corner of Greenland, formed by an island which he named "Shannon."

Returning to the Pendulum Islands as the best place for Sabine to make his observations, Clavering left the Griper and the philosopher there, and with his yawl, wherry, and a party of twenty, started off southward to see what he could see. At Cape Warren they landed, and found traces of natives and several graves. Proceeding up an arm of the bay, a tent of seal skins was found on the beach, and two natives appeared on the heights, who seemed not to differ from the common race of the Esquimaux. They were shy at first, but their confidence was gradually won. The whole tribe numbered only twelve. Great was their surprise at the firing of guns and pistols. One of them was induced to fire a pistol, and he was so frightened that he slunk away into his tent, and the following morning it was found they had all departed leaving their tents and everything behind them, doubtless frightened away by the magical effects of gunpowder.

On the 29th of August, Clavering and party returned to the Griper, and the philosopher having finished his experiments, all set sail on the 31st, coasting along the shore of Greenland till the 13th of September. The coast everywhere appeared mountainous, rising up in peaks from two to three thousand feet high. The ice floes and fields making it dangerous sailing near the shores, the Griper headed for Norway, where

they arrived on the 23d of September. At Drontheim Fiord, Capt. Sabine landed and made further experiments; the expedition then returned safely to England in December, after an absence of seven months, and after successfully accomplishing the results for which it was planned.

The scientific results of this and former expeditions of Captain Sabine and others, are thus summed up by him. "The attempt to determine the figure of the earth, by the variation of gravity at its surface, has been carried into full execution on an arc of the meridian of the greatest accessible extent, and the results which it has produced are seen to be consistent with each other, in combinations too varied to admit of the correspondence being accidental. They are in fact the combinations of twenty-eight stations—thirteen of Captain Sabine's, eight of the French Savan's and seven of the British Survey. The result is that the length of a pendulum vibrating seconds at the equator is 39.0152 inches. The increase of gravitation between the Equator and the Pole is 0.20245, and the ellipticity is $\frac{1}{230}$."

The second voyage of Capt. Lyon to the Arctic regions was undertaken with a view to complete the land survey of the eastern portion of the north coast of North America, from the western shore of Melville Peninsula to Cape Turn-again, the eastern limit of Franklin's first journey. Although it did not result in any great discoveries, it illustrates the perils and brings out in bright relief the heroic character of Arctic navigators. The vessel designated for the service was the Griper. She sailed from England June 19th, 1824.

At the Orkney Islands two ponies were taken

aboard ; also a cow and some sheep. The cow was so sea-sick that she refused to eat, and was therefore eaten ; but the ponies proved good sailors.

Early in June, the Griper approached Resolution Island at the entrance of Hudson's Strait. Here Esquimaux were met who brought articles for barter. Lyon says, "I blush when I relate it, two of the fair sex actually disposed of their neither garments." On the 22d of August Southampton Island was in sight. When off Cape Pembroke the compasses were found to be nearly useless.

As Lyon was taking a walk on shore one day he crossed an Esquimaux burial-place, and found the grave of a child slightly covered with stones, through which a snow-bunting had found its way to the neck of the child and there built its nest. This bird is considered by Arctic navigators as the robin of these dreary regions, having all the domestic virtues of the English redbreast ; its lively chirp and fearless confidence have rendered it respected by the most hungry sportsman. An English lady on reading this incident, was inspired with the following beautiful verses :—

"Sweet bird ! the breast of innocence
Hath fadeless charms for thee ;
Although the spirit long has fled,
And lifeless clay it be ;

Thou darest not to dwell with death,
Secure from harm or ill,
For on an infant's heart, thy nest
Is wrought with fearless skill

And, like our own familiar bird
That seeks the human friend,
Thou cheer'st the wandering seaman's thoughts
With home, his aim and end."

In Rowe's Welcome Bay, the fog, heavy sea, and shallow water combined, made navigation most peril-

ous. Of their situation here Lyon says: "I most reluctantly brought the Griper up with three bows and a stream anchor, but not before we had shoaled to five and a half fathoms, the ship pitching bows under, and a tremendous sea running." The peril being imminent, the long boat was prepared to be hoisted out with the four small ones, and the officers and men drew lots with great composure for their respective boats, although two of the boats would have been swamped the instant they were lowered.

"Although few or none of us had any idea that we should survive the gale, we did not think that our comforts should be entirely neglected, and an order was therefore given to the men to put on their best and warmest clothing, to enable them to support life as long as possible. Every man, therefore, brought his bag on deck, and dressed himself; and in the fine athletic forms which stood exposed before me, I did not see one muscle quiver, nor the slightest sign of alarm. And now that every thing in our power had been done, I called all hands aft, and to a merciful God offered prayers for our preservation. I thanked every one for their excellent conduct, and cautioned them, as we should in all probability soon appear before our Maker, to enter his presence as men resigned to their fate. We then all sat down in groups, and; sheltered from the wash of the sea by whatever we could find, many of us endeavored to obtain a little sleep. Never, perhaps, was witnessed a finer scene than on the deck of my little ship, when all hope of life had left us. God was merciful to us; the tide almost miraculously fell no lower, the wind ceased and we were saved." This locality was very properly named Bay of God's Mercy.

A similar storm occurred in September, opposite the mouth of Wager's River, during which one anchor after another parted, and the vessel drifted away in the darkness, but escaped wreck. The situation, however, was still a precarious one, and without anchors and in a crippled condition, the ship was headed for England where it arrived in November.

The object of Captain Beechey's expedition to Bering's Straits in 1825, was not so much for the purposes of discovery as to render assistance to Parry and Franklin, and especially to the latter—who was then on his second land expedition—should he be successful in working westward from the Mackenzie River to Kotzebue Sound, the place of rendezvous for both explorers.

Beechey sailed from England in the sloop Blossom, May 19th, 1825, with instructions to proceed around Cape Horn, visit the English possessions in the Pacific Ocean, and arrive at the rendezvous by July, 1826, there to remain till the approach of winter, in case neither Franklin nor Parry were heard from. Late in June 1826, the Blossom approached Petropaulski, after having sailed seven hundred miles in a dense fog, which now cleared up and revealed the lofty mountains and volcanoes of Kamchatka. "Nothing could surpass the serenity of the evening, or the magnificence of the mountains capped with perennial snows, rising in majestic array above each other. The volcano emitted smoke occasionally, and from a sprinkling of black dots on the snow to the leeward of the crater, we concluded there had been a recent eruption."

At Petropaulski, Beechey found dispatches announcing the return of the expedition under Parry. Cor-

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dial was the hospitality extended to the explorers by the citizens of the little town, and the pastor, in compliance with the injunctions of his grandfather, that he should send a calf to the captain of every English man-of-war that might arrive in the port, presented Beechey with one of his own rearing.

On the voyage north the Blossom stopped off Lawrence Island, and the natives immediately came out in boats, evidently anxious for a trade. One old lady amused the crew by her attempts to impose upon their credulity. She was seated upon a bag of peltry, from which she now and then drew out a skin, cautiously exhibited the best part of it with a look implying that it was of great value, repeatedly hugged it, and endeavored to coax her new acquaintances into a good bargain; but it was easy to see that her furs would not bear close examination. The tricks of trade are not confined to civilization. Tobacco was the great want of the men, and needles and scissors of the women, and with both blue beads were articles highly esteemed. They, however, seemed a little suspicious of the latter, and bit them, possibly to see if they were made of wax. The mode of salutation of these natives was by rubbing their noses against those of their friends and drawing the palms of their hands over the face.

Beechey passed Bering's Strait, which separates the two great continents, on one of those beautiful still nights well known to all who have visited the Arctic regions, when the sky is without a cloud, and when the midnight sun, scarcely his own diameter below the horizon, tinges with a bright hue all the northern circle. The extremities of the two great continents were distinctly seen, and the islands in the

strait clearly ascertained to be only three, as had been stated by Capt. Cook.

A little north of Cape Prince of Wales, they were again visited by the natives who were eager for trade and willingly sold everything they had, except their bows and arrows. They were noisy and ever ready for a joke. They had a curious appendage to their dress, worn as an ornament in the shape of a bird's wing or the tail of a fox, tied to the end of a string fastened to their girdles, which dangled behind as they walked, giving them a ridiculous appearance, and probably occasioning the report, recorded by some traveler, that the people of this country have tails like dogs. To this dog-tail slander, they might perhaps retort that civilized women had camel's humps on their backs.

At Schismareff Inlet were seen the lip ornaments common to this coast. They consist of pieces of ivory, stone or glass, formed with double heads, like sleeve buttons, which are inserted in holes bored in the under lip about half an inch below the corners of the mouth. The diameter of the orifice in those worn by adults is usually about half an inch, but Beechey saw one lip button made of polished jade stone, that was three inches in length and an inch and a half in width.

On the 22d of July, Beechey reached his rendezvous, Chamisso Island in Kotzebue Sound, but could find no traces of Franklin.

Leaving the barge to keep in shore on the look-out for Franklin, Beechey sailed northward as far as Icy Cape. Finding indications of the ice closing in, he then returned to the sound and dispatched the barge under the command of Messrs. Elson and Smyth with

instructions to trace the coast to the North-east as far as they could penetrate. They succeeded in surveying one hundred and twenty-six miles of new coast, and were stopped by a long, low, projecting tongue of land which they named Point Barrow. Here they were within one hundred and forty-six miles of the extreme point reached by Franklin.

By the middle of October the Esquimaux had all departed to their winter-quarters, the birds had migrated, the sea was rapidly being frozen, and Beechey sailed for San Francisco where he wintered.

In the following season, Beechey returned to Chamisso Island, where he anchored August 5th. Here the barge was again called into requisition, and under command of Lieutenant Belcher, it started north and reached a point some forty miles easterly of Icy Cape, but could go no further in consequence of the ice. On the way back Belcher stopped at Choris Peninsula to erect an observatory. While all the party but two were on shore, a gale sprung up. The crew were immediately ordered aboard and one trip of the small boat landed three persons on the barge, but an attempt to reach it a second time was unsuccessful. The vessel soon sunk in shallow water, and two of her crew were drowned in attempting to reach shore. The others retreated to the rigging, but one fell and perished; the other two were rescued after the sea subsided.

Meantime, Beechey had been on an excursion in the Blossom, and when returning to the rendezvous, discovered with telescopes a flag flying on the coast and two men waving white cloths. The possibility of its being Franklin's party was the first wish of his mind; but this was soon dispelled as a nearer view of the

flag proved it to be the ensign of his own boat hoisted with the union downward indicative of distress, and Belcher and his surviving men were soon recognized and cared for. They had experienced some trouble with the natives after the loss of their barge, and subsequently the crew of the Blossom had skirmishes with them in which several of the seamen were wounded by arrows, and one or more of the Esquimaux killed. Beechey did not punish them as they deserved, as he was unwilling to awaken sentiments which might prove injurious to other Europeans.

The balance of the season was passed in futile attempts to find Franklin, and grieved and disappointed, Capt. Beechey left Kotzebue's Sound, Oct. 6th, 1827; but did not arrive in England till the autumn of 1828, having been absent three and a half years.

CHAPTER XVIII.

PARRY'S POLAR VOYAGE.

THE scheme of reaching the Pole by traveling over the frozen surface of the ocean was first suggested by Mr. Scoresby. He believed that the Polar Sea in some meridians presented one continuous sheet of tolerably smooth ice, which could be traversed without great difficulty. The idea was taken up by Capt. Parry, whose brilliant voyages to the North-west had led him to suspect that further progress in that direction was hopeless, and an expedition was fitted out which left England, April 4th, 1827, in the sloop *Hecla*.

The plan was to proceed in this vessel as far north as possible, when a portion of the crew were to leave the ship, with two boats on runners, which were to be dragged or navigated as circumstances might admit, over the unknown and desolate expanse between Spitzbergen and the Pole. These boats were twenty feet long and seven broad, with runners attached to each side of the keel so that they could be drawn on the ice like sleds. Wheels were also taken along for use, if practicable.

At Hammerfest eight noble reindeer were taken on board ship, with which the adventurers hoped to make a stage journey to the Pole. As each boat with

its cargo weighed nearly two tons, a four-in-hand team would certainly be an aid on the icy road. At all events the deer served to beguile the tediousness of the passage to Spitzbergen, and all hands became much attached to them. The regular allowance of clean moss for each deer was four pounds daily, but in case of necessity they would go five or six days without provender and not suffer materially. The adaption of these animals to the Frigid Zone is wonderful. Snow is their favorite drink,—if the bull may be pardoned,—and cold, hard ice is as comfortable and elastic a bed as they desire; at least they never complain when furnished with such sleeping accommodations, canopied over by the vaulted arch of heaven.

Parry was enamored with his deer—the only drawback to his happiness being the thought that dire necessity might compel him and his crew to eat them.

The Hecla rounded Hakluyt's Headland May 14th; and met with a tremendous gale which almost lay the ship on her beam ends, and tossed her like a feather; and she was soon completely beset by a large floe which carried her eastward. After release from this tedious imprisonment of twenty-four days, came a long and anxious search for a secure harbor.

At length the Hecla was anchored in a fine harbor which the Dutch had named Treurenberg Bay, but now rechristened as Hecla Cove. Numerous graves were found on the shore. The bodies had been deposited in oblong boxes and covered with stones: a board near the head recording the name of the deceased and the time of his death. One was dated as far back as 1690, and Parry was right in conjecturing that the Dutch name of the bay was derived from *treuren*, to lament, on account of the mortality which had oc-

curred here. This was not encouraging to the party who were to remain with the ship, but there was no time to be lost, and brave sailors must not be frightened by graves or ghostly shadows.

On the 22d of June the excursion party left the ship amid the cheers of their associates. The boats were severally commanded by Parry and James C. Ross. Lt. Crozier, afterwards second in command of the lost Franklin expedition, was one of the officers who remained with the *Hecla*. Provision for seventy days were taken along, but the "eight tiny reindeer" were left behind, with the wheels, Parry having seen enough of the rugged surface of the ice to convince him that they would be of more use to Santa Claus than to himself. What became of these animals which had so much interested Parry, he omits to mention. The stern realities of the Northern Sea probably drove all sentimentalism from his mind.

For eighty miles they proceeded due north, sailing slowly through a calm and smooth open sea. In latitude $81^{\circ} 12' 51''$ they were stopped by slush ice, which could neither be walked nor sailed over, but was to be passed by the two methods alternately. Here commenced the real labor of their fatiguing and monotonous journey.

The first step was to convert night into day; to begin their journey in the evening and end it in the morning. Thus their notions of night and day became inverted. They rose in what they called the morning, but which was really late in the evening, and having performed their devotions, breakfasted on warm cocoa and biscuit. They then drew on their boots, usually either wet or hard frozen; and which, though perfectly dried, would have been equally soaked in

fifteen minutes. The party then traveled five or six hours, and a little after midnight stopped to dine. .

They now performed an equal journey in what was called the afternoon; and in the evening, that is, at an advanced morning hour, halted as for the night. They then applied themselves to obtain rest and comfort, put on dry stockings and fur-boots, cooked something warm for supper, smoked their pipes, told over their exploits, and, forgetting the toils of the day, enjoyed an interval of ease and gayety. Then, wrapping themselves in their fur-cloaks, they lay down in the boat, rather too close together perhaps, but with very tolerable comfort. The sound of a bugle roused them at night to their breakfast of cocoa, and to a repetition of the same round.

Instead of a smooth, level surface, which they expected to find, over which a coach might be driven, the ice consisted of small, loose and rugged masses, compelling the men to make two or three trips in order to bring up the boats and baggage. One day during heavy rain they advanced but half a mile in four hours. In short, it was found, by an observation taken at midnight on the 30th of June, that since they started on the ice, on the 25th, they had progressed northward only about twelve miles. All expectation of reaching the Pole was now relinquished, but hopes of reaching the 83d degree were entertained.

The party came at length to smoother ice and larger floes, and making better progress, persevered till the 20th of July, when they were mortified to find that their latitude was less than five miles to the northward of where it was on the 17th, although they had certainly traveled twelve miles in that direction. Parry began now to suspect that the ice was floating south-

ward, and that they were in the condition of the frog jumping out of a well, which jumped three feet and fell back two. Such a suspicion was disheartening to the officers, but was not communicated to the men who often laughingly remarked, "We are a long time getting to this eighty-third degree."

On the 26th they were only one mile further north than they were on the 21st, though they had in that time traveled northward twenty-three miles; thus it was ascertained that the southern drift of the ice was at the rate of over four miles per day. Parry concluded it was useless to persevere in the attempt even to reach the 83d parallel, and communicated the facts and his intentions to the men. Great had been their exertions, and great was their disappointment. They consoled themselves however with the belief that they had gone further north than any previous explorers. The highest latitude reached was $82^{\circ}40'$, which is a trifle farther north than the *Polaris* penetrated on her late trip. Their greatest distance from the *Hecla* was only one hundred and seventy-two miles, but to accomplish it they had probably traveled far enough to reach the Pole, as they had so many times trebled their track.

Nothing remarkable occurred on the return. It was no small satisfaction to the explorers to know that there would be no backsliding and that every mile of advance southward would count two or three miles. They arrived at *Hecla Cove* on the 21st of August, where they were received, says Parry, "with that warm and cordial welcome which can be felt but not described. Considering our constant exposure to wet, cold and fatigue, our stockings having been generally drenched in 'snow water' for twelve

hours out of every twenty-four, I had great reason to be thankful for the excellent health in which upon the whole we reached the ship."

The Hecla soon afterward sailed for England, and thus ended the first and only attempt that has been made to penetrate to the Pole over the frozen surface of the deep. All the prowess, energy, and hardihood of British seamen were exerted to the utmost without making even an approach towards the fulfillment of their object. The late Captain Hall hoped to reach the Pole by a sled journey over the ice and land, starting from the highest point that the *Polaris* could obtain; but there is little doubt that if he had lived to make the attempt, it would have proved an unsuccessful if not disastrous one. The Pole is a reality, and some benefit to science would accrue from observations taken thereon; but we may as well conclude that when God gave man dominion over the whole earth, that locality was not included or was considered unworthy of his presence.

CHAPTER XIX.

ARCTIC EXPEDITION OF JOHN AND JAMES C. ROSS.

John Ross, whose Expedition made under the auspices of the British Admiralty in 1818 was sorely criticised by the press and pronounced a failure, was not content to remain in inglorious ease, but felt an ambition so common to adventurers, to try his fortune once more. Ross's faith in the North-west passage never was very great; and the second expedition seems to have been undertaken more from a love of adventure and a desire to retrieve his good name, than from any well-grounded hope of success in its professed object. The perseverance and energy displayed in carrying it out were worthy of better results than it actually accomplished.

From his experience in his first Arctic adventure, and from careful study of the voyages of others, Ross became convinced that a small steamship would make better headway among the floes and fields of ice than a sailing vessel; and accordingly presented his views to the Admiralty as early as 1827, asking government aid for his new project. This proposal was not favorably received, and he then applied to his friend, Sir Felix Booth, a wealthy gentleman, who listened kindly to his statements, but finally decided not to embark

in the enterprise, lest it might be construed by the public as a mere mercantile speculation, in hopes of securing the reward of £20,000 offered by Parliament for the discovery of the North-west passage.

Not baffled by this second rebuff, Ross again applied to the Admiralty, submitting a modified, and as he thought, an improved plan of navigating the Arctic Seas by means of steam. The decided answer of the Admiralty was:—"Government does not intend to send out any more expeditions on this enquiry."

Soon after this Parliament revoked its offer of £20,000, which had tempted so many adventurers into the Polar Seas. This removed Booth's objection to aiding Ross, and he advanced the money necessary to buy and fit out the *Victory*, a steamer of one hundred and fifty tons. The whole cost was £17,000.

With his nephew, James Clark Ross, as commander, a purser, surgeon, and a crew of seventeen, Ross steamed down the Thames on the 23d of May, 1829. The steam fixtures did not prove to be as efficient as he expected, and his main reliance for the trans-atlantic voyage and indeed for the whole expedition, was upon sails.

On the 23d of July the *Victory* came to anchor in the harbor of Holsteinberg, a Danish settlement on the coast of Greenland, and was soon surrounded by canoes filled with Esquimaux, among whom were two whites clothed like the natives, who proved to be Mr. Kall, the governor, and Mr. Kijer, a clergyman, both well educated gentlemen who had resided in the country for six years. At the house of the latter the officers of the *Victory* were treated with great kindness, Mrs. Kijer doing the honors at the table, and Esquimaux girls, neatly dressed in native costume, doing the service. The settlement consisted of the governor's and clergyman's

houses, a church, two store-houses, and about forty Esquimaux huts. The church was a neat simple structure, surmounted with a small steeple, and having an audience-room furnished with an organ and seats for two hundred persons. Holsteinberg is a romantic and interesting place, but the governor and clergyman must have led self-denying lives in this solitude, away from all the social privileges of civilization. Peace and happiness are however of no country or situation, and here in this narrow and apparently contented circle they seemed to exist in perfection. No disorderly or immoral conduct was noticed among the natives; and Mr. Kijer represented the Greenlanders as so pacific in their dispositions that quarrels among them were very rare.

As an instance of their honesty, Capt. Ross relates that on the morning of his departure from Holsteinberg, a poor Esquimaux came alongside of the Victory, bringing an oar which had been lost from one of the boats, and adds: "I know not how far the exertions of the worthy clergyman deserve to share in the merit of this and the other good conduct which we witnessed, but be this as it may, I do but justice to the natural character of this race, almost everywhere in our experience, to say that they are among the most worthy of all the rude tribes yet known to our voyagers in any part of the world."

The singing of the Esquimaux girls in church astonished and delighted the captain, and he was assured that they learned to sing the most refined sacred music of the German school with great facility, and the Moravian missionaries have made music a powerful auxiliary in religious instruction and civilization. Some of the Esquimaux have not only been taught

to sing, but to play, and construct their own instruments.

On the 7th of August the Victory steamed into Lancaster Sound. The sea was covered with minute marine animals and ducks, and gulls were in sight; no ice of any kind was to be seen. Ross proceeded westerly, till he reached Prince Regent Inlet, into which he turned his ship and sailed southerly in search of the place where the Fury was wrecked, hoping to replenish his stock of provisions from her stores.

On the 13th of August the Victory entered a bay, which was christened Adelaide in honor of the Duchess of Clarence, it being her birth-day. On the afternoon of the next day, Commander Ross, who had been the lieutenant of the Fury, recognized a high-projecting precipice as being some three miles from the wreck, for which all eyes were looking; and, an hour afterward, the tents were seen on the mound where the shipwrecked stores had been deposited. The same evening the Victory was safely moored in an ice harbor, within a quarter of a mile of the coveted goods. The coast was found almost lined with coal; and one tent—the mess-tent of the Fury's officers—remained whole, though it was evident the bears had paid it frequent visits. A pocket near the door of this tent, in which Commander Ross had left his memorandum-book, was missing. The preserved meats and vegetables were found in good condition. The canisters had been piled up in two heaps, and though exposed to all the vicissitudes of the climate for four years, they had not suffered in the slightest degree. There had been no water to rust them, and the security of the joinings had prevented the bears from smelling the contents. Had they known the feast of fat things contained within those shining tins, not much would

have remained for the crew of the Victory. The wine, sugar, bread, flour, and cocoa, were found in equally good condition. The lime-juice and the pickles had not suffered much, and even the salis were not only dry, but looked as if they had never been wet. Not a trace of the hull of the Fury was to be found.

The stores, not the wreck, were what Capt. Ross wanted. With great delight the crew set about embarking a sufficiency of stores to complete the equipment of the Victory for over two years. This fitting out a vessel in an abandoned region of ice and rocks, was a novel scene. Without money and without price the crew carried on board the Victory canister after canister of provisions, and yet all they could store away on board seemed scarcely to diminish the pile. Ten tons of coal, some anchors, and some carpenter's stores were also appropriated. The powder magazine had become unroofed, but the patent cases had kept the powder perfectly dry, and with a portion of this the new outfit was ended.

Captain Ross' plan was to make a thorough survey of Prince Regent's Inlet, and ascertain whether there was any outlet from it to the Polar Sea; he therefore proceeded from Fury Beach southward. The voyage now began to acquire its peculiar interest as the Victory was traversing a comparatively unknown region. The land seemed to extend in a south-west direction continuously, and the captain gave it the name of Boothia, in honor of his patron. Many whales came close to the ship, thus proving that they had never had a taste of the harpoon.

The geological structure was limestone, containing shells. Some sandstone and gneiss were also observed, and in many of the small bays, there were accumula-

tions of sand. The soundings were in clay, so tough as to require great force to extract the lead from it. There was no wood; a heath with stems about an inch thick, being the largest plant growing.

A harbor was found sufficiently deep and large to accommodate the whole British navy, and to this was given the name of Elizabeth, in compliment to a sister of Mr. Booth. In many parts of it there were five fathoms of water close to rocks or shore, where vessels might lie as at a pier; and from marks on the rocks it was judged that the spring-tide rose eight feet. Near the sea the land was generally bare, but inland there were plains and valleys of considerable extent covered with vegetation. In the valleys were numerous lakes, some of them two miles long, and all well stocked with fish. As the season advanced navigation became more and more difficult and hazardous. The Victory drawing but a few feet of water, had great advantage in navigating the Arctic Seas, but still her perils were many. Captain Ross thus graphically describes the appearance of those seas.

“To those who have not seen a northern ocean in winter, the term ice, exciting but the recollection of what they know of it at rest in an inland lake, conveys no idea of what it is the fate of the Arctic navigator to witness. But let them remember that ice is stone, a floating rock in a stream, a promontory or an island when aground, not less solid than if it were granite. Then let them imagine, if they can, these mountains of crystal, hurled through a narrow strait by a rapid tide; meeting as mountains would meet, with the noise of thunder, breaking from each other precipices, huge fragments, or rending each other asunder, till, losing their former equilibrium,

they fall over headlong, lifting the sea around in breakers, and whirling it in eddies, while the flatter fields of ice, forced against these masses, or against the rocks by the wind and stream, rise out of the sea till they fall back on themselves, adding to the indescribable commotion and noise which attend these occurrences."

On the last day of September Captain Ross determined that further progress was impossible for the season, and that his next duty was to look out for winter quarters. An inevitable detention among immovable ice made his men feel like captives upon whom the prison doors were being closed for long and weary months. Making an inland excursion, he ascended a high hill to take a general survey of the situation. At the south-west appeared a succession of uniform low hill, beyond which no water was to be seen. In the interior he could see even through the snow, that the plains were covered with vegetation. Many tracks of hares were seen, and some of these animals were shot, which were at this early date quite white, showing that their change in color is not the effect of temperature, but a prospective arrangement for meeting the cold of winter. There were also many Esquimaux traps with a great number of cairns or stones, which at a distance resemble men, and are erected by the Esquimaux for the purpose of frightening the deer and turning them within reach.

In the meantime the crew were set to work unloading the ship of the steam engine and fixtures which had proved an incumbrance. Thenceforth the Victory was simply a sailing vessel.

By October 8th there was not an atom of water to be seen anywhere, and excepting the protrud-

ing point of some dark rock, nothing but one dazzling and monotonous, dull and wearisome extent of snow was visible. Captain Ross describes the effect of this uniformity, silence and death as paralyzing to both body and mind. Nothing moves, nothing changes; all is forever the same—cheerless, cold, and silent.

The Victory had not made the progress expected of her, but she went into winter quarters one hundred and sixty-six miles beyond the wrecking-ground of the Fury. An examination of the provisions and fuel gave the comforting assurance that there was enough of both to supply all wants for more than two years; and officers and crew settled down for a long winter's repose.

The record of the winter is monotonous. Captain Ross studied carefully the effects of the cold upon himself and men, and came to the conclusion that there is great difference in individuals as to their power of generating heat. A ruddy, elastic, florid, or clear complexioned man, is secured by nature against cold; while the pale, sallow, and melancholy-looking, are not the men for an Arctic voyage.

The deck of the Victory being covered with snow to the depth of two-and-a-half feet, it was trod down till it became a solid mass, and was then covered with sand, so as to have the appearance of a solid gravel walk. Above this a roof was built, and the sides of the vessel were banked with snow up to the roof so as to form a perfect shelter from the wind and ward off much of the extreme cold. On this deck the men walked for exercise when the cold was too excessive for them to venture abroad. From six o'clock in the evening till nine, the men were required to attend school, and on Sunday prayers were offered

and a sermon read; the good effects of their educational and religious duties were manifest in the conduct of the men, who seemed to feel that they belonged to one family, and evinced much mutual kindness and a remarkable propriety of deportment. The use of spirituous liquors was abandoned, and even the habit of swearing was broken up.

Christmas was celebrated with a liberal dinner, of which roast beef formed the essential and orthodox portion. The stores from the *Fury* came into play on this day, as they included mince pies and iced cherry brandy. Flags were displayed from the ship and shore, the church service allotted for the day read, and one and all enjoyed the festival more probably than those whose lives of uniform ease, peace, and luxury, render them insensible to hard-won enjoyment. The thermometer ranged from 18 to 22 below zero.

January 9th, some Esquimaux appearing on the shore, the officers went out to meet them and found them armed with spears and knives. Captain Ross hailed them with the Esquimaux salutation, *tima, tima*, and was answered by a general shout of the same kind, the natives throwing their weapons into the air, and extending their arms. An embrace on the part of Captain Ross, and a stroking of the dress of the Esquimaux, the sign of friendship, established unhesitating confidence, which they manifested in the great delight apparent on their countenances, and in laughing, clamor, and strange gestures. They were all well dressed in excellent deer-skins, the upper garments double and encircling the body, and extending from the chin to the middle of the thigh. Of the two skins which formed this double dress, the inner one had the hair next to the body, and the outer one in

a reverse direction. The trousers were also of deer skin, reaching low on the leg, and each had on two pairs of boots, with the hairy side of both turned inward. With this immense superstructure of clothing, they looked much larger than they really were, and more like woodchucks walking on their hind legs than men. Their cheeks were plump, and of as rosy a color as possible under so dark a skin. Their faces were good-natured, their eyes dark, nose small, and the hair black and cut short, and carefully arranged.

Three of these Esquimaux being introduced into the cabin, were greatly delighted with some engravings of their countrymen, which they instantly recognized as portraits of their race. The sight of themselves in a looking-glass excited their greatest astonishment. They did not relish the preserved meat, but being offered some oil, drank it with great gusto. Thus admirably are the tastes of all men adapted to the food within their reach, and their views of happiness to the means provided for their enjoyment. A Hand thus spreads for His creatures a table in the wilderness.

The next day Captain Ross visited the village of these Esquimaux, about two-and-a-half miles distant, which he found to consist of twelve snow-huts, having the appearance of inverted basins. Each had a long crooked appendage, which formed the entrance, and at its mouth sat the women and children. This passage, always long and generally crooked, led to the principal apartment. Opposite the doorway there was a bank of snow about two-and-a-half feet high, level at the top, and covered with skins, forming the general bed, or sleeping-place for the whole. At the end of this snow-couch sat the mistress of the home, op-

posite to the lamp, which being of moss and oil, as is the universal custom, gave enough light and heat to render the apartment comfortable. Over the lamp was the cooking-dish of stone, containing the flesh of deer and seals, cooking in oil. Dresses, implements, and provisions lay about in unspeakable confusion, as order is not one of the Esquimaux virtues.

A large oval piece of clear ice, fixed about half way up on the eastern side of the roof, served to admit external light to their snow-houses. In the entrance passage, there was a little ante-chamber, arranged for the comfort of the dogs, and the mouth of the entrance was changed with each change of wind, so as always to open to the leeward.

The females were certainly not beautiful, but, what is better, were well behaved. All above thirteen years of age seemed to be married, and there were three or four such in every house—apparently three young wives in a house where there was one old one, a modification of Mormonism, which Brigham Young will do well to consider. All were tattooed to a greater or less extent, chiefly on the brow and on each side of the mouth and chin.

In the following spring, Ross, "the nephew of his uncle," and really the enterprising genius of the expedition, started off on a sledge journey of nearly a month, during which he penetrated westward two hundred miles, and discovered King William's Sound and King William's Land.

The Victory was held fast in the ice for eleven months, and only released on the 17th of September, 1830. This long imprisonment through the summer months was enough to discourage any but Arctic adventurers. Their sledge journeys had satisfied them that

there was no western passage from Regent's Inlet, to the south of their position, and it was with delight that they once more found themselves free to retrace their course northward. After advancing about three miles they encountered a field of ice, through which they vainly endeavored to saw their way. On the 30th of September there was no water to be seen. On all sides lay snow and ice. They did not, however, relinquish their endeavors, but spent the month of October in sawing through ice which was constantly increasing in thickness. They struggled like drowning men, but were opposed by King Frost, who is a mighty power in those regions.

Obliged at last to submit to his sovereignty, the utter monotony of their situation pressed upon them with increasing severity, and they were led to envy the Esquimaux, to whom eating and sleeping was the whole of life.

In the following spring James Ross started off on a sledge excursion, to ascertain the precise location of the Magnetic Pole. In this he was successful. In latitude $70^{\circ} 5' 17''$, and longitude $96^{\circ} 46' 45''$ west, he found the dip of his needle to be $89^{\circ} 59'$, being thus within one minute of vertical. On this spot he erected a cairn of some magnitude, and placing under it a canister containing a record of the event, and over it the British flag, he formally took possession of the North Magnetic Pole and its adjoining territory of Boothia, in the name of Great Britain and King William IV.

This was doubtless an approximation to the position of the Pole, as it then was, as scientific men had previously fixed it in this neighborhood, from observations of their compasses in various circumjacent latitudes; but the trouble with this pole is that it does not stay

fixed, but moves 11' 4" each year, and revolves around the North Pole of the earth once in 1890 years. According to this calculation it will come around to Ross's cairn in Boothia again in A. D. 3721.

After a second imprisonment of eleven months, the Victory was warped into open sea, August 27th, 1831, but after advancing four miles in one month, she was again ice-bound, September 27th, and another desolate winter was spent in Regent's Inlet—how desolate none can tell who has not suffered similar solitude and monotony.

As the experience of two summers left them little hope of saving the ship, Captain Ross and his officers resolved to abandon the Victory, and travel over the ice to Fury Beach, and thus avail themselves of the boats, which might enable them to reach Davis's Straits. Accordingly, on the 29th of May, 1832, the colors of the Victory were hoisted and nailed to the mast, and the captain and crew took a sad leave of her. "It was the first vessel," says Ross, "that I had ever been obliged to abandon, after having served in thirty-six, during a period of forty-two years. It was like the last parting with an old friend, and I did not pass the point where she ceased to be visible without stopping to take a sketch of this melancholy desert, rendered more melancholy by the solitary, abandoned helpless home of our past years, fixed in immovable ice till time should perform on her his usual work."

After incredible fatigue and hardship, the crew reached Fury Beach in the latter part of July, where, thanks to Parry and Providence, they found boats and provisions in good condition. August 1st, they embarked in their boats on an open sea, and after much buffeting, many perils, and a month of toil, they

reached the mouth of the inlet. Here they were doomed again to a sad disappointment, for after several fruitless attempts to run along Barrow's Straits, the ice obliged them to haul their boats on shore and pitch their tents. Day after day they lingered till the third week in September; but the strait continuing one impenetrable mass of ice, it was unanimously agreed that their only resource was to fall back on the stores at Fury Beach, and there spend a fourth long winter in the Arctic Circle. They were only able to proceed half the distance in boats, and on the 24th of September left them behind on the shores of Batty Bay.

The rest of the journey was performed on foot, the provisions being drawn in sledges. On the 7th of October they reached the canvas hut, dignified with the name of Somerset House, which they had erected in July, on the scene of the Fury's wreck, to which they thought they had bid a last farewell.

Building a snow wall four feet thick around their canvas house, strengthening the roof with spars so that it might be covered with snow, and putting up another stove, they continued to make themselves comfortable, until the scurvy broke out among them and several of the men fell victims thereto. It was indeed an anxious and doleful winter, for, should they be disappointed in their hopes of escaping the next summer, their failing strength and diminishing stores left them little hope of surviving another year. As the summer opened, they moved forward stores to Batty Bay, a distance of thirty-two miles; but as their numbers were now reduced, this land carriage taxed their strength sorely, and it occupied a month. Another month was passed at Batty Bay, in constant expectation of the moving of the ice.

At length on the evening of August 14th, the sight of moving ice gladdened their hearts; on the morning of the 15th, they slowly made their way through the masses of ice with which the bay was encumbered, and to their great joy they found, on the 17th, the wide expanse of Barrow's Strait, open to navigation. Pushing on with renewed hope, Cape York soon lay behind them, and by alternately rowing and sailing, they rested on the night of the 25th in a good harbor on the eastern shore of Navy Board Inlet.

At four o'clock the following morning, they were roused from their slumber by the joyful announcement of a ship in sight, and never did men more hurriedly and energetically start in pursuit; but the elements were against them, and the ship disappeared in the distant haze. Another vessel, however, was seen a few hours afterward, lying in a calm, and by hard rowing they soon came up with her; strange to say, she proved to be the *Isabella*, the same vessel in which Captain Ross had made his first trip to the Arctic seas, now employed as a whaler.

The officers of the *Isabella* could scarcely credit the story of Captain Ross, as he had long been supposed to be dead; when all doubts were removed, the rigging was instantly manned to do the adventurers honor, and thundering cheers welcomed Ross and his gallant band on board. The scene that followed can not better be described than in Captain Ross's own words:—

“Though we had not been supported by our names and characters, we should not the less have claimed from charity the attentions that we received, for never was seen a more miserable set of wretches. Unshaven since I know not when, dirty, dressed in rags of wild

beasts, and starved to the very bones, our gaunt and grim looks, when contrasted with those of the well-dressed and well-fed men around us, made us all feel (I believe for the first time) what we really were, as well as what we seemed to others. But the ludicrous soon took the place of all other feelings ; in such a crowd and such confusion, all serious thought was impossible, while the new buoyancy of our spirits made us abundantly willing to be amused by the scene which now opened.

“Every man was hungry, and was to be fed ; all were ragged, and were to be clothed ; there was not one to whom washing was not indispensable, nor one whom his beard did not deprive of all human semblance. In the midst of all, there were interminable questions to be asked and answered on both sides ; the adventures of the Victory, our own escapes, the politics of England, and the news which was four years old. But all subsided into peace at last. The sick were accommodated, the seamen disposed of, and all was done for us which care and kindness could perform.

“Night at length brought quiet and serious thoughts, and I trust there was not a man among us who did not then express, where it was due, his gratitude for that interposition which had raised us all from despair which none could now forget, and had brought us from the borders of a most distant grave, to life, and friends, and civilization. Long accustomed, however, to a cold bed on the hard snow or the bare rocks, few could sleep amidst the comforts of our new accommodations. I was myself compelled to leave the bed which had been kindly assigned me, and take my abode in a chair for the night ; nor did it fare much better with the rest. It was for time to reconcile us

to the sudden and violent change, to break through what had become habit, and to inure us once more to the usages of former days."

The party reached England, October 15th, 1833, after an absence of four-and-a-half years. Having long been considered as lost, they were looked upon as men risen from the dead, and met and escorted by a crowd of sympathizers. Orders, medals, and honors were showered upon John Ross by his own countrymen and continental sovereigns, and Parliament granted him £5,000 as some remuneration for his outlays and hardships. A baronetcy was conferred on Felix Booth, the patron of the expedition.

John Ross and James C. Ross subsequently appeared again in the Arctic Seas as searchers for Franklin.

CHAPTER XX.

GEORGE BACK'S EXPEDITIONS.

CAPTAIN George Back will be remembered as a companion of Franklin on his first land expedition. He was in Italy at the time when the prolonged absence of the Rosses began to awaken fears for their safety. Hastening home, he volunteered to lead a land expedition in search of the lost explorers, and, accompanied by Dr. King, left England for New York in February 1833, for that purpose.

Back and King left Montreal April 25th, in two canoes amid enthusiastic cheering, and as the boats turned their bows up the noble St. Lawrence, one loud huzza bade the travelers farewell. The route lay up the Ottawa. Paul, an old Iroquois guide who knew every rock in the whole line of rapids between Montreal and Hudson's Bay, was the pilot.

On the 17th of June, the travelers arrived at Norway House, where they halted to enlist volunteers to guide and accompany them. The experts in wilderness life were reluctant at first to engage in the enterprise, but James McKay, a powerful Highlander and one of the best steersmen in the country, having consented to enlist, there was no further trouble in securing men. Among other applicants two Canadians, old acquaintances of Back's, came nearly breathless with haste, and were enlisted.

But, "there is many a slip between the cup and the lip." These Canadians had wives, and these wives thought they had rights, as surely they had. The different conduct of these women illustrates the two great methods by which the gentle sex enforce their rights. One, a good strapping dame, cuffed her husband's ears with such dexterity and good will, that he was fain to cry *peccavi* and seek shelter in a friendly tent; the other, an interesting girl of seventeen, burst into tears, and with piteous sobs clung to the husband of her love, as if she would hold him prisoner in her arms. The result proved that each method was equally effectual, for Back lost the services of the men.

Leaving Norway House on the 28th of June, and proceeding by the usual route, Back approached Cumberland House on the 5th of July. The crew dressed themselves out in all their finery—silver bands tassels, plumes and feathers, intending to approach the station with some military effect; but unfortunately for the poor fellows, the rain fell in torrents, their feathers drooped, and to complete their discomfiture they were obliged to walk in their crestfallen condition for a mile in the mud before reaching the station.

The boats, stores, etc., were all in readiness for a start, and Capt. Back had the satisfaction of getting his two batteaux under way on the 6th of July. Each was laden with a cargo weighing over two tons, exclusive of men, bedding, and clothes. Yet with such steersmen as McKay and Sinclair, no apprehension was felt for their safety.

Back lingered behind a day or two, and then advanced in his canoe with eight attendants under the pilotage of his skillful guide, De Charloit, a half-

breed, and soon overtook Dr. King with the large boats. The contrast between the rapidity of motion of the two parties was striking. The water was very low, and the cumbrous batteaux were dragged in some places laboriously a few paces at a time by the united exertions of those on board and those on shore. Sometimes unable to resist the force of the impetuous current they were swept back; at others, suspended on the arched back of a wave, they struggled and labored until they were again in the shelter of some friendly eddy. But the canoe, frail as she was, was threaded through the boiling rapids and sunken rocks with fearful elegance.

On the 21st of July, the party reached Portage la Loche, the high ridge of land which divides the waters running into Hudson's Bay from those which direct their course to the Arctic Sea. Here a beautiful and picturesque view opened to their sight. A thousand feet below, the sylvan landscape lay spread out in all the wild luxuriance of its summer clothing. Even the most jaded of the party seemed to forget his weariness, and halted involuntarily to gaze with admiration on a spectacle so magnificent.

On the 8th of August they reached Great Slave Lake and were welcomed at Fort Resolution. The remainder of the month was spent by Back in exploring this lake and searching for Great Fish River, called by the Indians Thlew-ee-choh, and now named in honor of our explorer, who was the first to descend it, Back's River.

Many encampments of Indians were passed, whose occupants were employed in drying the flesh of moose recently killed. The hunters were lying at full length on the grass, whiffing the cherished pipe,

INDIAN SUMMER ENCAMPMENT.

MOOSE HUNTING—YUKON RIVER.

could bestow but little on the wretched sufferers, who began to imagine that the instruments in the observatory kept the deer at a distance and caused their sufferings. Even the voyageurs were superstitiously impressed, and on one occasion two of them listened by the fence built around the observatory, and hearing at intervals the words "now" and "stop," always succeeded by silence; they turned hastily away and reported to their companions that they verily believed the captain was "raising the devil."

In November, the chief Akaitcho, the old acquaintance of Franklin, arrived very opportunely with some meat which was of great benefit to all. When he went away he took some of the starving Indians with him, and promised Back that he should not want as long as he had anything to send to the fort. And he kept his word, and during a most appalling period of suffering and calamity proved himself the firm friend of the expedition; the dawn of each morning saw him prepared for the hunt, and he boldly encountered every difficulty and made others act by the force of his example.

In describing the scenes of this winter Back says:—
—"No sooner had one party closed the door than another feebly opened it, and confirmed by their half-famished looks and sunken eyes their heart-rending tale of sufferings. They spoke little, but crowded in silence around the fire, as if eager to enjoy the only comfort remaining to them. A handful of mouldy pounded meat which had been intended for the dogs was all we could give them; and this, with the customary presentation of the friendly pipe, was sufficient to efface for a moment the recollection of their sorrows, and even light up their faces with a smile of hope."

In March, information came that Augustus, the Esquimaux interpreter and Back's old friend, hearing that he was in the country had set out to join him, and walked from Hudson's Bay to Fort Resolution for that purpose. From this place he started with a Canadian and Iroquois, who were taking dispatches to Back; but they all lost their way, and the couriers returned to the fort without Augustus, who had persisted in going on alone. In June the remains of the brave Esquimaux were found near the Riviere a Jean. "Such," says Back, "was the miserable end of poor Augustus!—a faithful, disinterested, kind-hearted creature, who had won the regard not of myself only, but I may add of Sir John Franklin and Dr. Richardson also, by qualities, which, wherever found, in the lowest as in the highest forms of social life, are the ornament and charm of humanity."

On the 25th of April 1834, a messenger arrived with the glad tidings of the safe return of Ross and his party to England. Back, however, thought it his duty to explore Fish River, and on the 7th of June left Fort Reliance for this purpose. Though no longer stimulated with the desire to render aid and comfort to Ross, he was heartily glad to get away from scenes of suffering and death, and launch out again into stirring adventure.

In descending the Fish River, eighty or ninety miles of the distance was a succession of falls and rapids, keeping the men in a constant state of exertion and anxiety. Cataracts, too, obstructed their passage. In passing down one of these, where the river was full of rocks and boulders, the boat was obliged to be lightened.

"I stood," says Back, "on a high rock, with an anxious heart, to see her run it. Away they went with the speed of an arrow, and in a moment the foam and rocks hid them from my view. I heard what sounded in my ear like a wild shriek; I followed with an agitation which may be conceived, and, to my inexpressible joy, found that the shriek was the triumphant whoop of the crew, who had landed safely in a small bay below."

Near the close of July, Back approached the mouth of the Fish River and discovered a majestic headland which he named Victoria. He thus sums up a general view of the tempestuous stream which he had successfully descended:—

"This, then, may be considered as the mouth of the Thlew-ee-choh, which, after a violent and tortuous course of five hundred and thirty geographical miles, running through an iron-ribbed country, without a single tree on the whole line of its banks, expanding into fine large lakes with clear horizons, most embarrassing to the navigator, and broken into falls, cascades, and rapids to the number of no less than eighty-three in the whole, pours its waters into the Polar Sea in latitude $67^{\circ} 11' N.$, and longitude $94^{\circ} 30' W.$ "

Drift-ice was here encountered, and further progress was slow, but on the 7th of August the party reached Point Ogle, the northern extremity of the land on the western side at the mouth of the estuary. From this point portions of the coast of Boothia were seen to the northward. Further explorations by water were impossible, but a party proceeded westerly along the coast of the Arctic Ocean for about fifteen miles, in the direction of Cape Turn-again.

The country was low, level and desolate and pro-

duced nothing but moss and fern, which was so wet that it would not burn. The weather was chilly, damp and foggy, and the situation of the explorers grew cheerless and miserable. Surrounded on every side by complete desolation, without fire or any kind of warm food, with heavy rains followed by thick snows, "it cannot," says Back, "be a matter of astonishment, and much less of blame, that even the best men, benumbed in their limbs, and dispirited by the dreary and unpromising prospect before them, broke out for a moment into low murmurings that theirs' was a hard and painful duty."

Back had now no choice but to start on the return journey, which was commenced the middle of August. Before setting out, the British flag was unfurled, and saluted with three cheers "in honor of his most gracious majesty," and the name of William the Fourth's Land was given to this part of America.

The many difficulties which had been experienced in going down the river were at least doubled in returning, but the explorers reached Fort Reliance in safety on the 27th of September. Preparations were immediately made for spending another winter in this dreary place. Hunting and fishing were the order of the day, and wood was collected to keep off the cold, which proved to be less severe than usual.

About the last of May they gladly bade adieu to the inhospitable region, and reached Norway House on the 24th of June. Back returned home by way of Montreal and New York, and received many kind attentions during his journey through the United States. He reached England in September, after an absence of over two and a half years, and was there honored by an audience with the king.

Soon afterwards, the English admiralty decided to send out an expedition to complete the survey of the coast between Regent's Inlet and Point Turnagain, and for this purpose Captain Back sailed from England in the "Terror," with a crew of seventy-three men. Near the Savage Islands they encountered a fleet of kayaks and oomiaks, and were hailed by their occupants with vociferous cries of *teyma*. Back says that the conduct of the women was particularly outrageous; besides disposing of their garments they offered to barter their children, and one of them noticing that an officer had but little hair on his head, offered to supply him with her own.

Early in September, when near the entrance of Frozen Strait, the Terror was seized by the ice as with the grasp of a giant, and during the whole of that month was whirled backward and forward just as the wind or tide directed. "It was," says Back, "a month of vexation, disappointment, and anxiety, to me more distressing and intolerable than the worst pressure of the worst evils which had befallen me in any other expedition."

It was soon evident that there could be no escape for several months, and that nothing could be done but to make the situation as comfortable as possible. Snow walls and galleries were built on the floes; and towards spring, for amusement, some of the men cut figures of houses, forts, vessels, and men and women, from blocks of snow. Most of the crew could read, some could recite long passages of prose and poetry, others could sing; and by bringing out the talents of each for the common benefit, the whole were made at times comparatively happy.

Thus drifting about and at times undergoing terrif

ic nips, the Terror remained fast in the ice till the 11th of July, when, after several days spent by the crew in attempting to cut her free, a loud rumbling noise was heard, and the ship broke her ice-bonds and slid gently into her own element; but so much of the base of her ice cradle still clung to her, that she remained on her beam ends for three days after.

Nothing now remained but to get home as soon as possible with the crazy, broken and leaky Terror, and the voyage thither was as perilous as her encounters with the ice had been. On reaching the coast of Ireland, the ship was run ashore in a sinking condition, and could hardly have floated a day longer. She was afterwards refitted, and with her and the Erebus, James C. Ross made his explorations in the Southern Seas. Subsequently, Franklin and his lost expedition sailed in the same famous ships.

The ice-drift experiences of the Terror much resemble those of the Advance and Rescue while searching for Franklin—a full history whereof is given in Dr. Kane's narrative of the First American Expedition.

CHAPTER XXI.

LAND EXPEDITIONS OF DEASE AND SIMPSON, AND RAE.

As a considerable extent of the northern coast of America still remained unexplored, the Hudson's Bay Company determined, in 1836, to equip an expedition of twelve men under the lead of two of its own officers—Peter W. Dease and Thomas Simpson. The latter was a young and well-educated Scotchman who had resided in the territory since 1829; he was full of zeal for scientific discovery, and the astronomer and historian of the expedition.

Before setting out, Mr. Simpson spent several months at the Red River Settlement, situated near the 50th parallel at an elevation of eight or nine hundred feet above the sea, which then stretched for upwards of fifty miles along the wooded borders of the Red and Assiniboine Rivers which flow through a level country of vast extent. There was no speculative motive to induce him to color his picture of this region, and he may the more readily be relied on when he states, that the climate is salubrious, the soil good, horses, cattle, hogs and poultry numerous; and that wheat, barley, ~~oats~~, and potatoes thrive well in the vast Red River Valley. This testimony should

WINTER COURTESY OF THE NORTH-WEST PUG COMPANY.

remove the suspicions which some have, that more recent travelers in this section have been induced to give glowing descriptions thereof from mercenary considerations.

Mr. Simpson left this colony on the 1st of December for his winter journey of one thousand two hundred and seventy-seven miles to Fort Chipewyan, the starting point of the expedition. A gay cariole and three sledges drawn by dogs, with three picked men as drivers, made up the retinue. Much of the route lay over the frozen channels of the streams, and frequently the tinklings of the dog-bells roused the moose-deer from their lairs. At times the snow was so deep that snow-shoes had to be worn by the travelers. Fort Chipewyan, where Mr. Dease awaited his companion, was reached on the first of February.

The travelers took their departure from this place on the 1st of June 1837, and on reaching Great Slave Lake, ten days afterwards, were disappointed at finding it covered with ice which detained them till the 21st of June—a delay which they beguiled with hunting, and with observing the wonderful mirage of this region and the games and sports of the Indians. A dance was also given to the men in which the Indian women joined. It furnished much sport, and was concluded with a generous supper, tea being the only beverage. The games of the people without the fort were generally at their height at midnight, when the coolness of the atmosphere incited to exertion.

Fort Norman on the Mackenzie River was reached on the 1st of July, and on the 9th, the Arctic Ocean at the mouth of the river was seen, and saluted with joyous cheers. As the season was favorable, the

explorers proceeded westerly along the coast, and on the 23d of July arrived at Return Reef, where Franklin had been stopped. Beyond this was unexplored territory. Pushing on, they discovered the mouth of a river and named it the Colville. They supposed it to be a large one, for it freshened the waters of the ocean to a distance of three leagues. Their conclusions were right, for the Colville River, now in the United States territory of Alaska, has since been ascertained to be a thousand miles long.

They also discovered another noble river, the Garry, whose mouth was a mile in width. Though the ground was frozen four inches deep, a few flowers cheered the eye of the travelers. On the 1st of August the party had arrived within two degrees of Point Barrow, the most eastern point reached by the barge of the Blossom. As further progress was here prevented by the ice, Simpson with five companions pushed on afoot, and on the 4th had the great satisfaction of seeing the long, low spit of land called Point Barrow stretching to the northward. On reaching it, they unfurled the British flag with three cheers and took possession of this gravelly cape in the name of their king. The last portion of the journey to Point Barrow had been made in an oomiak which was borrowed of a party of Esquimaux met on the way. The landing at Point Barrow was made at a place half way between a winter village and summer camp of the natives, and in the vicinity was an immense cemetery, where the remnants of humanity lay on the ground in the usual seal-skin clothing. The natives were generally friendly, but thievish.

Having reached the limit of their explorations in

this direction, the whole party returned to winter-quarters at Great Bear Lake. In the summer of 1838 they again commenced their travels, and on the 25th of June were nearing the mouth of the Coppermine. Franklin had descended the lower part of this river when it had fallen to its summer level, but Dease and Simpson were swept down it by the spring flood, in which floated cakes of ice, while the banks were piled up with pondrous fragments. Mr. Simpson thus describes some of the perils of the passage :—

“The day was bright and lovely as we shot down rapid after rapid, in many of which we had to pull for our lives, to keep out of the suction of the precipices, along whose base the breakers raged and foamed with overwhelming fury. Shortly before noon we came in sight of Escape Rapid of Franklin, and a glance at the overhanging cliffs told us that there was no alternative but to run down with a full cargo. In an instant we were in the vortex, and, before we were aware, my boat was borne towards an isolated rock, which the boiling surge almost concealed. To clear it on the outside was no longer possible. Our only chance of safety was to run between it and the lofty eastern cliff. The word was passed, and every breath was hushed. A stream, which dashed down upon us over the brow of the precipice, more than a hundred feet in height, mingled with the spray that whirled upward from the rapid, forming a terrific shower-bath. The pass was about eight feet wide, and the error of a single foot on either side would have been instant destruction. As, guided by Sinclair’s consummate skill, the boat shot safely through those jaws of death, an involuntary cheer arose.”

On the 1st of July the party reached the sea, and

on the 17th they started to coast along its shores to the eastward. On arriving, about the 10th of August, in the vicinity of Point Turn-again the boats were arrested by ice. On the 20th, Simpson with seven men started on a walk along the coast. On the 23d they came to an elevated rocky ridge which was named Cape Alexander. On ascending it, a vast and splendid prospect burst suddenly upon the travelers. The sea, as if transformed by enchantment, rolled its free waves at their feet, and extended to the eastward as far as could be seen. Islands of various shapes and sizes overspread its surface; and the northern land terminated to the eye in a bold and lofty cape thirty or forty miles distant. On the extensive land to the northward, Simpson bestowed the name of Victoria, and he called its eastern extremity Cape Pelly.

After surveying nearly one hundred and forty miles of new coast easterly of Point Turn-again, the foot party returned to the boats. Early in September the return journey up the Coppermine was commenced, and on the 14th of that month Fort Confidence, the old winter-quarters on Great Bear Lake, was safely reached.

Here the winter of 1838-9 was passed by the explorers, and in June 1839, undaunted by the dangers and privations of the previous season, they again started on their third successive visit to the Arctic Sea.

On the 3d of July their boats emerged from the Coppermine, and sailing eastward the party encamped on the 26th at Cape Alexander. Continuing their voyage, they discovered, on the 10th of August, a strait three miles wide through which they passed. Three days afterward, they were delighted at reaching Cape Ogle at the mouth of the Great Fish River.

All the objects for which the expedition was fitted out had now been accomplished. The northern limits of America to the westward of the Great Fish or Back's River had been surveyed, but it still remained a question whether Boothia might not be united to the continent on the other side of the estuary. So the party pushed on to a point distant about two degrees from Point Ogle, where they came to the mouth of a river, which they named the Castor and Pollux after their two boats. This river was the limit of their eastern explorations.

In returning to the Coppermine River they crossed over to the northern side of the strait, and traced the southern coast of King William's Island for about sixty miles till it turned to the north at Cape Herschel, distant ninety miles from the magnetic pole. Along these same dreary coasts the party of Sir John Franklin attempted to make good their retreat about ten years later; and one of his boats, with skeletons, guns, etc., was subsequently found some distance above Cape Herschel.

The explorers also surveyed the coasts of Victoria Land for a long distance, and reached the Coppermine on the 16th of September, having made a voyage of over sixteen hundred miles on the Polar Sea—the longest one ever made thereon in open boats.

Mr. Simpson left Fort Confidence on the 26th of September, 1839, and after a journey of 1910 miles made on foot within sixty-one days, he arrived at Red River Settlement early in February, 1840. Here he remained waiting for authority from England to proceed on a new expedition which he had proposed to lead. Deeply mortified at not receiving answers to his dispatches as soon as he expected them, he left

the settlement on the 6th of June with a party of half-breeds and settlers, intending to cross the prairies to St. Peter's on the Mississippi River, and thence proceed to England.

Mr. Simpson subsequently went on ahead with four men, and beyond this all that is known with certainty is, that on the 13th of June Simpson shot two of his companions; that the other two rejoined the larger party, and that a portion thereof went to his encampment on the next morning and killed him. Whether he shot the two men in self-defence or when suffering under a temporary hallucination of mind was never known by his friends.

Messrs. Dease and Simpson supposed that they had sailed to the eastward of Boothia, and that the isthmus which Ross said connected Boothia with the continent, did not exist. To explore the coast line which was, in consequence of their discoveries, believed to extend from the Castor and Pollux easterly to the Fury and Hecla Strait—whose waters connect with Hudson's Bay—the Hudson's Bay Company sent out an expedition in 1846 under Dr. John Rae.

Dr. Rae, with twelve men and two boats, left Fort York on the 12th of June, and coasted northerly along the westerly shores of Hudson's Bay. On the 24th of July they anchored at the head of Repulse Bay. They then proceeded northerly, taking one boat with them, over an isthmus interspersed with lakes, forty-three miles to Committee Bay, the southerly extremity of Prince Regent's Inlet. Finding that the season was too far advanced to complete the survey that year, Rae determined, with a boldness and confidence in his own resources that has never been surpassed, to winter in Repulse Bay, and to finish his

explorations on the ice the next spring. He therefore recrossed the isthmus with his boat, and set about collecting provisions and fuel for a ten months' winter.

To one less experienced and hardy, the desolate shores of Repulse Bay would have forbidden such an attempt. They yielded neither drift-wood nor shrubby plants of any kind; but Dr. Rae employed part of his men to gather the withered stems of a small herbaceous plant which grew in abundance on the rocks, and to pile it in cocks like hay: others he set to build a house of stone and earth called Fort Hope; while he and his Esquimaux interpreter were occupied in killing deer for winter food.

Early in April, 1847, Rae and part of his men started with sledges drawn by dogs, and after again reaching Committee Bay, traveled northerly along its western shore, and on the 18th reached the Lord Mayor's Bay of Sir John Ross, on whose shores the crew of the lost Victory so long resided. This journey proved that Ross was right in supposing that Boothia was connected with the continent. No attempt was made to proceed westerly to the Castor and Pollux, and the party immediately set out on their return to Fort Hope.

On the 12th of May Rae started to examine the eastern coast of Committee Bay, and on the 27th had reached his farthest point at a headland, which he called Cape Crozier, situated about twenty miles south of the west end of the Fury and Hecla Strait. He then returned to Repulse Bay, and the whole party arrived safely at Fort Churchill on the last day of August. The entire expedition had been an eminently successful one, and proved that Dr. Rae was well calculated for an Arctic explorer.

CHAPTER XXII.

SIR JOHN FRANKLIN'S LAST VOYAGE, WITH A SKETCH OF HIS LIFE.

One of the most enthusiastic and indefatigable explorers of the Arctic regions of this, or any other age, was Sir John Franklin. His history as an eminent navigator,—his persistent, cheerful zeal for the accomplishment of a favorite object through obstacles, dangers, and oftentimes intense suffering, won for him the admiration and respect of the civilized world; and especially has the uncertainty of his fate excited an almost universal interest.

JOHN FRANKLIN was born at Spilsby, Lincolnshire, England, April 16th, 1786. He was the youngest son of a respectable farmer in moderate circumstances, with a family of twelve children to provide for and educate. John was intended by his parents for the Church, and at an early age was placed in a grammar school to prepare ultimately for the ministry. But his tastes led him in a different direction. He had a passion for the sea. While a school-boy at Louth, he took advantage of a holiday to walk twelve miles, with a companion, to look at the ocean, which he then beheld for the first time. The effect upon his mind was wonderful. He gazed upon it for hours with emotions of intense delight, and from that day his

heart burned as it never did before, to trace its boundaries and explore its mysteries.

His father, thinking his son carried away by a boyish romance, and that he had no idea of the unpoetical shade of a sailor's life, hoped that a little experience of its hardships and discomforts would break the charm, and cure him of his folly. Accordingly he gave John permission to make a voyage in a merchant vessel to Lisbon. But the experiment proved an unfortunate one, so far as the father's wishes were concerned, for it only served to intensify the boy's passion for a sea-faring life. Mr. Franklin, becoming convinced that it was useless to attempt any longer to change the propensity of his son, yielded to his wishes, and procured for him a position in the navy as a midshipman, at the age of fourteen. He was placed on board the *Polyphemus*, a ship of the line, and served in her at the battle of Copenhagen, April 2d, 1801. During the engagement, a young midshipman and comrade was shot dead standing by his side.

In the ensuing summer he was more pleasantly employed on board the *Investigator*, a government ship commanded by his cousin, Captain Flinders, who was commissioned to explore the coasts of Australia. After nearly two years spent in this service, which was an excellent preparatory school to qualify him for future pursuits, he with the officers and crew sailed for home in the *Porpoise*, a store-ship—the *Investigator* having been condemned as unseaworthy. But the *Porpoise*, shortly after leaving port, was wrecked upon a reef about two hundred miles from Australia. Here he and his companions remained fifty days, upon a small sand-bank, until relief came to them from Port Jackson. The crew was now dis-

persed, and Franklin was taken to Canton, where he obtained a passage to England on board an armed Indiaman. On their way home they were attacked by a French man-of-war, which, after a severe conflict, was compelled to retire in a crippled condition. During the battle, young Franklin distinguished himself for bravery and efficiency.

On reaching England he was ordered to join the ship-of-the-line, *Bellerophon*, and in 1805 took part in the memorable battle of Trafalgar, in which he discharged the responsible duties of signal midshipman, with remarkable coolness and courage, in the midst of a hot and most destructive fire from the enemy's sharpshooters. Of forty persons who stood around him on the poop of the ship, many fell, and only seven escaped unhurt.

Subsequent to this, he served six years on board the *Bedford*, on various stations, the last of which was on the coast of the United States, during the war of 1812-15. He commanded the boats of the *Bedford* in a battle with the American gun-boats at New Orleans, one of which he boarded and captured, though at the expense of a severe wound. For his gallantry in this action, he was promoted to a lieutenancy.

In 1818 Franklin made his first Arctic voyage as commander of the *Trent*, and with Captain Buchan attempted to sail over the North Pole. In 1819 he started on his first great overland journey to the shores of the Arctic Ocean, which occupied about three years.

In 1823 he was married to Eleanor Porden, daughter of an eminent architect, a lady of superior abilities, who distinguished herself at a very early age by her remarkable attainments in Greek and Latin,

and also in several modern languages. She was also a proficient in botany, chemistry, and geology. She was, in addition, a poetess of no ordinary promise. In 1818, she published the "Arctic Expedition"—a poem. This led to her acquaintance with Franklin, to whom she was united in marriage in 1823.

About a year and a half after his marriage, Franklin was appointed to the command of another overland expedition to the Arctic Ocean. The appointment, though in accordance with his chivalric enthusiastic nature, was, in one respect, very inopportune. His devoted wife was in a rapid decline, and evidently drawing near her end. When the day assigned for his departure arrived, she was lying at the point of death. To leave her, in such circumstances, was like tearing out his heart-strings; but she insisted that he should not delay his departure an hour on her account, and as he took his leave of her, she, with a kiss, gave him as a parting gift, a silk flag, with a request that he would hoist it on reaching the Polar Sea, which he did. She died, much lamented, the day after her husband left England.

On his return from his two overland journeys, Franklin published narratives thereof; no one can read them without deep respect and admiration for the brave Christian spirit which sustained him and his companions during the most appalling hardships. The most interesting portions of these narratives have been given in preceding chapters.

In 1828, Franklin was married to Miss Jane Griffin, daughter of John Griffin Esq., and born about 1800. She still survives, and has distinguished herself the world over, by her public spirit, and her indomitable perseverance in search of her lost husband. In the

same year he published a narrative of his second expedition, which did him much credit. In the following year he was knighted, and received an honorary degree from the University of Oxford, and a gold medal from a learned society in Paris.

In 1830, Sir John, as he was from that time called, was put in command of the *Rainbow*, and ordered to cruise in the Mediterranean. While absent, he had opportunity of rendering important service to the Greeks, who were then struggling to throw off the Turkish yoke, under which they had long been sorely oppressed. In recognition of his kindness, King Otho decorated him with the cross of the "Redeemer of Greece." Probably no commander of a ship ever paid more attention to the comfort of those placed under him than Franklin, and the sailors expressed their sense of his kindness by calling his vessel the "Celestial Rainbow," and "Franklin's Paradise."

In 1836, he was appointed governor of Van Diemen's Land, which position he held till 1843. His administration in this colony was remarkably popular and useful. He originated, and executed many important measures for the benefit of the colonists, for which they made both public and private demonstrations of their gratitude. He founded a college and endowed it largely from his own funds, to be conducted on the most liberal principles, without distinction of sect.

When he resigned his office and returned to England, universal regret was expressed by the people of the colony. On the day of his departure, a more numerous gathering than had ever been seen on the island, attended him to the ship, and he was much gratified by receiving complimentary and affectionate addresses

from every district in the colony. As evidence of the affection these remote colonists cherished for him, they, years afterward, spontaneously raised nearly \$10,000, and forwarded it to Lady Franklin to aid her in fitting out an expedition to search for her missing husband.

Notwithstanding the numerous unsuccessful attempts to discover a North-west passage to the Pacific Ocean, it was still the firm belief of scientific men that such a passage did exist, and the desire to solve the problem of centuries was undiminished; although reasonable men had long been convinced that if such a passage was found, the dangers and difficulties of navigating the Northern seas were so great as to preclude the use of it for purposes of commerce.

England especially was ambitious of the honor of proclaiming to the world that the great question was settled, and was also actuated by a more laudable desire to promote the interests of science. Although she had already expended much treasure, and sacrificed many valuable lives in the undertaking which had long been the dream of her philosophers, she determined to make another attempt to accomplish it.

Accordingly, in 1845, the two ships, the "Erebus" and "Terror," in which Sir John Clarke Ross had just returned from his career of discovery in the Southern seas, were fitted out. Both were of moderate size, and renowned for their fitness to encounter ice. They were now provided with small steam engines and screw propellers, and a three years' supply of every thing that could contribute to the health and comfort of voyagers in the Arctic regions. The vessels were also furnished with ship-stores, tools, nautical instruments, fire-arms, and a large supply of ammunition; in short,

with every thing imagination and experience could suggest, that would be needful for officers and crew.

It was hardly a question with the Admiralty, who should be appointed to the command of this enterprise,—it was Sir John Franklin, of course. No other man in England was better qualified for this important and perilous undertaking. He had talent, sound judgment, kindness of heart, large experience, and had lost none of his youthful enthusiasm for adventure, although nearly sixty years of age. The achievement of a “North-west passage” had been the day-dream of his life, and he was glad of an opportunity to make another attempt for the realization of his long-cherished hopes. He unhesitatingly accepted the appointment.

The second in command was Captain Francis R. M. Crozier, a bold and experienced navigator, who had been with Parry in all his northern voyages, and was second officer in command of the Antarctic expedition under Ross. Crozier was appointed captain of the *Terror*, and Franklin sailed in the *Erebus*. The crews of these two vessels, amounting in all, including officers, to one hundred and thirty-eight souls, were picked men, hardy, experienced, bold, reliable, and enthusiastic.

Franklin was instructed to proceed through Lancaster Sound, and westward in the latitude of $74\frac{1}{2}^{\circ}$ until he reached the longitude of 98° west. From that point he was to penetrate to the southwest towards Behring's Straits.

The ships sailed on the 19th of May, 1845, accompanied by a tender with additional supplies. This tender was dismissed in Davis's Strait, and letters from the officers and crew carried back—the last ever re-

ceived from them. One of the men wrote as follows:—"I need hardly tell you how much we are all delighted with our captain. He has, I am sure, won not only the respect but the love of every person on board, by his amiable manner and kindness to all; and his influence is always employed for some good purpose, both among the officers and men. He takes an active part in everything that goes on."

A letter which Sir John wrote to his friend Colonel Sabine, contained the following:—

"I hope my dear wife and daughter will not be over-anxious if we should not return by the time they have fixed upon; and I must beg of you to give them the benefit of your advice and experience when that time arrives, for you know well that without success in our object, even after the second winter, we should wish to try some other channel if the state of our provisions and the health of the crews justify it."

The ships started northward again on the 13th of July; on the 26th of July they were spoken near latitude 75° by the whaler *Prince of Wales*, which was boarded by seven officers of the expedition, who invited the captain to dine with Sir John on the following day. But as a breeze favorable for the whaler sprang up in the night, its captain set sail without receiving on board any of the letters which the explorers doubtless intended to give him before he left them. When the *Prince of Wales* left the two ships, they were moored to an ice-berg.

This was the last ever seen of the "*Erebus*" and "*Terror*," and the last direct intelligence that has been received from Sir John Franklin and his men to this day. Years elapsed before any indication of their fate or the faintest trace of the lost explorers were discovered.

CHAPTER XXIII.

SEARCHES FOR SIR JOHN FRANKLIN.

(EXPEDITIONS OF 1848.)

As the year 1847 drew to a close without bringing any intelligence from Franklin, great solicitude for his safety was felt in England, and the government resolved to send out three distinct expeditions to search for him. Each of these was to have its own independent route, but all were to converge toward the Arctic Archipelago, through whose intricate and unexplored channels and sounds Franklin was supposed to be striving to force his way. One of these expeditions was to sail direct to Lancaster Sound, and follow in the track of the missing ships; another was to proceed overland down the Mackenzie River, and examine the coasts of the continent; and the third was to go by way of Bering's Straits.

The command of the first named expedition was given to Captain James C. Ross, who sailed from England, June 12th, 1848, with two ships, the *Enterprise* and *Investigator*—the latter being commanded by Captain E. J. Bird. Each ship was provided with a steam launch. The passage through Baffin's Bay was difficult and tedious, and Lancaster Sound was not reached till nearly the last of August. At its

entrance and while sailing along its coasts, the shores were carefully scrutinized for traces of Franklin. Guns were fired when foggy; rockets and lights were frequently burned; and casks containing information for the benefit of the missing men were daily thrown overboard.

On the 1st of September, Ross reached Cape York at the east side of the entrance to Prince Regent's Inlet. He then crossed the inlet, and coasted the northern shores of Barrow's Strait, far enough to see that Wellington Channel was firmly frozen. On the 11th of September he with great difficulty reached Port Leopold, which is situated at the junction of the four great channels, Lancaster Sound, Barrow's Strait, Wellington Channel, and Prince Regent's Inlet. The next day the ice-pack closed the mouth of the harbor and the expedition was fast for the winter, which the crews passed in a comfortable manner.

Over fifty white foxes were taken alive during the season in traps constructed of casks, and after being fitted to copper collars upon which were engraved the position of the ships and provision depots, they were set at liberty, in the hope that some of them might be caught by Franklin's men.

On the 15th of May, Ross and Lieut. McClintock with twelve men, made a journey to the south, and examined the northern and western shores of North Somerset, but found no traces of Franklin, and the party returned to the ships, June 23d, in an exhausted condition. In their absence other unsuccessful searches had been made, and one party visited the house on Fury Point in which Sir John Ross passed the winters of 1832-3.

It was now midsummer, but the Enterprise and

Investigator were still blockaded by the ice. Preparations for leaving were however made, and, as a refuge for lost explorers, a house covered with canvas was erected on the shore of spars and other material. A large supply of provisions was stored therein; and one of the launches was put in good order, to be left behind.

After an imprisonment in the ice of one year less fourteen days, the ships were liberated on the 28th of August, and steered toward the northern shore of Barrow's Strait; but they were soon surrounded by ice, and it seemed probable that they would remain therein for another winter. Soon afterward, however, the whole body of ice began to drive to the eastward, and the ships were carried with it through Lancaster Sound and down the westerly shores of Baffin's Bay. Here a great number of icebergs stretched across the path, and presented the crews a fearful prospect of the destruction of their vessels. But when least expected by them, the great ice-floe was rent into innumerable fragments, as if by some unseen power, and the vessels were released from its grasp. But it was evident that the hunt of the *Enterprise* and *Investigator* was over for that season; so they were turned homeward, and reached England in November 1849. The searchers had found no clue as to where the lost explorers were, but had learned of some places where they were not.

The overland search for Franklin was entrusted to Sir John Richardson assisted by Dr. John Rae. These gentlemen left Liverpool March 25th, 1848, and reached the Hudson's Bay Company territory, via New York and Montreal. Proceeding thence to Great Slave Lake by the usual route, they crossed it,

and entered the Mackenzie River, July 21st. The sea was reached early in August, and here Esquimaux were met in great numbers—all anxious to trade, or steal, as opportunity offered; but of Franklin or his ships they knew nothing.

After entering the Arctic Ocean, Richardson coasted eastward for some eight hundred miles, hoping to reach and ascend the Coppermine River; but when near its mouth, ice prevented further progress of the boats, and they were hauled into a safe position, as far as the elements were concerned, and abandoned with nearly all their contents. It was subsequently ascertained that the goods were appropriated by the Esquimaux, who also destroyed the boats to secure the iron and copper used in their construction.

The party now proceeded on foot to the Coppermine River and up its valley, and reached Fort Confidence on Great Bear Lake, Sept. 15th. Here they passed the winter. The next summer, Dr. Rae with six men descended the Coppermine for the purpose of searching the coasts of Wollaston and Victoria Land; but the strait was so full of ice that he could not cross it, and the party returned to Fort Confidence at the close of August. Dr. Richardson left the fort on the 7th of May, and reached Liverpool in November after an absence of nineteen months. Not the slightest information of Franklin had been obtained; but provisions and letters were buried in several places, and signal posts indicating the precise spots set up to attract the attention of the castaways if they chanced to come that way.

The expedition by way of Bering's Strait was put under command of Captain Henry Kellett, of the ship *Herald*, which was then in the Pacific. On

receiving instructions from home to that effect, Kellett proceeded to Kotzebue Sound, but returned to winter at the Sandwich Islands. Another vessel, the Plover, commanded by Thomas E. L. Moore, started from England January 1st, 1848, to join the Herald, and passed the winter of 1848-9 at Noovel, Kamchatka.

On the 14th of July, 1849, the Plover anchored off Chamisso Island, Kotzebue Sound, the appointed rendezvous, where she was joined the next day by the Herald, and by the yacht Nancy Dawson, in which its owner, Robert Shedden, had started on a pleasure trip around the world. While in China, Mr. Shedden heard of the intended expedition, and resolved to join it in the search for Franklin.

On the 18th, the three vessels sailed north, and on the 25th had reached Icy Cape. At this point an expedition of four boats under Lieut. Pullen, accompanied by the yacht, proceeded up the coast as far as Dease's Inlet. The yacht and two of the boats then returned to the ships, which meantime had cruised to the north until ice was encountered. Lieut. Pullen, with the other two boats, continued the search easterly to the mouth of the Mackenzie, which he ascended, reaching Fort Simpson on the 13th of October. Here he wintered; and in the following season he descended the river, and remained on the sea coast till the first of September. Returning to Fort Simpson he proceeded to England, and again joined in the search as commander of the North Star.

In September, the three vessels rendezvoused in Kotzebue Sound, and on the 29th of that month, leaving the Plover to winter there, the Herald and the Nancy Dawson started south. The gallant Shed-

den, who had taken an active and daring part in the summer's search, died at Mazatlan soon afterward.

In July, 1850, the Herald again joined the Plover at the rendezvous, and the two vessels started north together, but on encountering ice separated. The coast between Icy Cape and Point Barrow was carefully examined by the Plover. The two vessels met again in August, and fell in with the Enterprise—Captain Collinson—which had just arrived to join in the search. When winter came on the Herald sailed for England, and the Plover anchored in Grantley Harbor. At a subsequent date the Plover also returned home.

CHAPTER XXIV.
SEARCHES FOR SIR JOHN FRANKLIN.
(EXPEDITIONS OF 1850.)

FIVE years had now elapsed since Franklin left England, and not a word had been heard from him since the Prince of Wales parted from the Erebus and Terror in Baffin's Bay. Hopes were however entertained that the missing explorers were still alive, and the desire to rescue them became intense. The search, in which the United States now joined, was accordingly renewed with increased vigor. Several fresh expeditions were dispatched from England to the scene of action. One of them consisting of two ships, the Enterprise and Investigator, under Collinson and McClure, sailed for Bering's Strait, via Cape Horn; and others, whose history is given in this chapter, took the old route up Baffin's Bay.

The most important of these expeditions via Baffin's Bay, was entrusted to the command of Captain H. T. Austin, and comprised two ships—the Resolute and Assistance—and two screw steamers—the Pioneer and Intrepid. These vessels were commanded respectively by Captain Austin, Captain E. Ommaney, Lieut. S. Osborne, and Lieut. B. Cator. Captain Austin's squadron sailed from England in May, 1850, its par-

ticular mission being to search the shores of Wellington Channel, and Melville Island.

The season proved an unfavorable one for Arctic navigation, and the ships, being beset by ice in Melville Bay, did not reach Lancaster Sound till August. The Assistance and Intrepid undertook the examination of the north shores of this sound, and on the 23d reached Cape Riley, at the entrance to Wellington Channel, where were found the first traces of the lost expedition. The Rescue, one of the U. S. exploring vessels, was also at Cape Riley at the time and shared in this discovery.

Soon afterward several ships of other expeditions were in the neighborhood of Cape Riley; and on Beechey Island, three miles distant from the cape, were found very interesting relics of Franklin's party, and the graves of three of his men. All went to show that the crews of the Erebus and Terror had here made their first winter-quarters. Dr. Kane, of the Advance, carefully examined all these traces of Franklin, and his descriptions thereof will be found in a subsequent chapter of this book.

Leaving Beechey Island and sailing westerly, Austin's squadron reached a position between Cornwallis Island and Griffith's Island where the vessels were frozen in the ice for the winter. In the spring, sledge excursions were made along Parry's Strait. Captain Ommaney with one hundred and four men and fourteen sledges, traveled four hundred and eighty miles—two hundred and five of which had never been explored. In this journey, occupying sixty days, sails were occasionally hoisted on the sledges, and large kites were also attached. When the wind was high, these aids propelled the sledge very rapidly,

and the whole of the party then rode; but when the wind fell, the sledges, with their provisions and stores, had to be dragged by main force over the ice by the men harnessed to them.

A second sledge excursion, under Lieut. McClintock, traveled seven hundred and sixty miles, discovered forty miles of coast, and achieved the furthest westing that had ever been attained in this part of the Polar Sea—a point in latitude $74^{\circ} 38'$ and longitude $114^{\circ} 20'$. To the north of Bank's Land and at a distance of about seventy miles, he discovered a range of land apparently running nearly due west. Following the coast of Melville Island to the northeast, he entered Liddon Gulf, and here saw fragments of coal of good quality. In June he found Parry's encampment of 1820, and the "strong but light cart" in which Parry carried his tent and stores, and the kettle containing the cylinder in which was enclosed Parry's record. Placing the kettle over the fire, the cylinder was thawed out and the record carefully unfolded; but nothing but the date could be distinguished. McClintock then struck across the land to Winter Harbor, another of Parry's encampments, which evidently had not been visited since 1820. The inscription there cut on a large sandstone boulder was still legible. On the 6th of June he started to return to the ship, and reached it July 4th.

These searches having resulted in finding no traces of the Erebus and Terror west and north of the mouth of Wellington Channel, Austin concluded that they had probably steered for the Polar Sea through Jones' Sound, and he therefore visited that locality with his two steamers. After going up the sound some forty-five miles he was arrested by a fixed barrier of ice.

He found no traces of Franklin's party, and, concluding that any further effort would be useless, he set sail for England where he arrived in the autumn of 1851.

Among the searchers for Franklin was the veteran Sir John Ross, who sailed from England, April, 1850, in a small vessel called the *Felix*, accompanied by his own yacht, the *Mary*, as a tender.

Sir John overtook Austin's squadron off the coast of Greenland on the 11th of August, and on the 13th fell in with some Esquimaux near Cape York, who told him, that in the winter of 1846 two ships were crushed in the ice a little further up the coast, and their crews, some of whom wore epaulets, killed by the natives. A subsequent investigation led Austin to believe that the whole story was untrue; but Ross, long after his return to England, adhered to his theory that the lost explorers perished in Baffin's Bay in the manner indicated by the Esquimaux.

Ross, however, continued the search as previously arranged with Austin, and on the 19th of August when off Admiralty Inlet, was overtaken by the *Advance*, Lieut. De Haven, at just about the spot where Ross had been picked up by the *Isabella* seventeen years before. Ross bore a part in the discoveries made at Cape Riley and vicinity, and subsequently wintered in the ice near Austin's ships.

When Ross left England a lady gave him four carrier pigeons, two of which he was to liberate at a stated time, and the other two when he found Franklin. Ross sent off the first pair on the 6th of October in a basket suspended to a balloon, during a north-west gale. By a slow-match arrangement the birds would be liberated at the end of twenty-four hours.

On the 13th of October a pigeon arrived at the dovecot of the lady, which she believed to be one of those given to Ross. It brought no message, but that was believed to have been lost during the long transit.

Another of the expeditions of 1850 was fitted out wholly through the efforts of Lady Franklin, and mostly at her expense. It consisted of a ship and a brig, the Lady Franklin and the Sophia, and was placed in charge of Captain Penny, who had had much Arctic experience as master of a whaling ship.

Although the expedition was an independent one, Penny co-operated with the others, and after participating in the search at Cape Riley his vessels were frozen up for the winter a few miles easterly of Austin's squadron.

In the spring, Captain Penny undertook the search of Wellington Channel, and on the 17th of April six sledge parties started under his general superintendence. The principal discovery was a wide strait to the north of Cornwallis Island, which was named Victoria Channel.

Full of faith that Franklin had gone up this channel Penny hastened back to the ships for a boat, which he mounted on sledges, and after incredible fatigues and tantalizing delays, he launched on the channel and examined three hundred and ten miles of the coast, when, his provisions failing, he was compelled reluctantly to retrace his course. His perseverance on this expedition entitles him to an honorable name among Arctic explorers.

On the 12th of August, 1851, the Lady Franklin and Sophia, again free from the ice-grip, were started homeward, and arrived safely in England about the middle of September.

Supplementary to Captain Penny's expedition was that of the schooner Prince Albert under Captain Forsyth. Lady Franklin had still some funds left, and thought they could not be better invested than in equipping another vessel to go in search of her lost husband. Making use of all her available means she defrayed about two-thirds of the cost of this expedition, and her friends paid the balance. Captain Forsyth was ably assisted by Commander W. P. Snow, and both were volunteers, who desired no further compensation than the satisfaction of rendering aid to a noble man and an equally noble lady. They were instructed to examine the shores of Prince Regent's Inlet, which at the time Franklin sailed was supposed to communicate with the Polar Sea through Dease's Strait.

Captain Forsyth sailed from Aberdeen on the 5th of June, and on the 21st of August arrived off Port Leopold. Here he landed, and found that the house constructed by Sir John Ross was in good condition to furnish a retreat for Arctic adventures, and the stores were abundant and in good order.

Losing no time here, the Prince Albert boldly entered Prince Regent's Inlet. When they were sailing past Batty Bay the crew were greatly excited by hearing what they supposed was the firing of a gun on shore. The officers directed their glasses to the land, but nothing human was to be seen. The howitzer was fired, but there was no response, and reluctantly they concluded that the noise they had heard was occasioned by the falling of a rock or masses of ice.

When off Fury Beach, the schooner's progress was stopped by a dense fog, and when this cleared the vessel was found in a bight of ice within a few yards

of a hummocky field, in which not one crack of open water could be seen from the crow's-nest. Forsyth and Snow concluded that their mission to Boothia was effectually thwarted for that season, and turning the bow of the Prince Albert northward, proceeded to the vicinity of Cape Riley, where they fell in with several vessels of the English and American expeditions. Learning of the discoveries which had been made there but a day or two previously, they joined in the search, and then, with some of the relics of Franklin's party, started homeward where they arrived on the 1st of October.

One other vessel which was in Barrow's Straits in 1850 should here be mentioned. The North Star left England in 1849, with stores for the expedition of James C. Ross, but she was beset by ice in Melville Bay and drifted up the coast of Greenland, where she wintered in lat. $76^{\circ} 33'$. Four of her crew died before she escaped from the ice. She arrived at Port Leopold, Aug. 13th, but finding the harbor full of ice, proceeded to Navy Board Inlet near Wollaston Land, where she put on the mainland her surplus stores and fuel. Then scudding before a gale, she sailed through Lancaster Sound, and arrived in Scotland on the 28th of September, 1850.

CHAPTER XXV.

SEARCHES FOR SIR JOHN FRANKLIN.

(DISCOVERY OF A NORTH-WEST PASSAGE.)

THE Bering's Strait Expedition referred to in the last chapter, consisted of two ships, the *Enterprise*, Captain Richard Collinson, and the *Investigator*, Commander Robert McClure. These brave men sailed on their benevolent and hazardous mission, January 20th, 1850, and made a safe and speedy passage to Bering's Strait. On the 28th of August Collinson had reached a position north of Point Barrow, but being unable to penetrate further on account of the ice, he sailed for Grantley Harbor, where the *Plover* was preparing her winter-quarters. Here an unsuccessful attempt was made to get the *Enterprise* over the bar at the mouth of the harbor; and after consulting with Captains Kellett and Moore, of the *Herald* and *Plover*, Captain Collinson sailed for Hong Kong, proposing to renew the attempt to get north in the spring.

Meantime the *Investigator*, having outsailed the *Enterprise*, fell in with the *Herald*, July 31st, off Point Hope, and was seen by the *Plover*, August 5th, 1850, in lat. $70^{\circ} 44'$, bearing gallantly to the north under a press of sail. Nothing further was heard of McClure in England until the Autumn of 1858,

when Lieut. Cresswell, of the Investigator, arrived there with information that McClure and his crew had reached Beechey Island, having discovered the long sought for North-west passage.

After passing Point Barrow, some men were sent ashore to erect a cairn and bury a notice that the Investigator had passed. They were met by three natives who gave the usual distant sign of friendship by raising their arms three times over their heads, and when in close proximity the less agreeable one of rubbing noses. They had seen the masts of the Investigator the previous evening and wondered at the sight, thinking them to be trees in motion. They were very friendly but could give no information of Franklin, and McClure concluded that none of his crew had ever been in that vicinity. "The natives," says McClure, "are a kind and merry race, and when we gave them presents, we told them that we were looking for our lost brothers, and if they saw any white men in distress, they were to be very kind; to which they assented by saying that they would, and would give them plenty of deer's flesh."

On the 10th of August, Colville River was passed, and the color of its waters was discernible at a distance of ten miles from the shore. The Esquimaux were numerous about the mouth of this river and apparently had never seen white men before, as they manifested great curiosity and had no articles of European manufacture. They were eager for traffic, sharp at a bargain, and not slow in thieving. Seeing some of the sailors cutting tobacco in pieces to give in exchange for salmon trout, they began to cut the fish also into pieces, and while McClure was placing a present in the right hand of the chief, he felt the

fellow's left hand picking his pocket. The chief laughed heartily when detected, and seemed to think it no crime.

On the 21st of Aug., the Investigator passed the mouth of the Mackenzie River, and soon afterward reached Warren Point. As some natives were here seen on shore, a boat put off with dispatches which McClure wished to have forwarded to the Hudson's Bay Company's posts on this river. Instead of making the usual friendly sign the natives waved off the boats with the most menacing gestures, and were only pacified when the interpreter, in full native costume, explained the object of the Investigator. It was found that these Esquimaux had no intercourse with those on the Mackenzie, being at war with them. A brass button suspended from the ear of one of the chiefs excited much curiosity, and he told this story of its history: It had belonged to a white man who had been killed by a native. The stranger was one of a party which had landed at Point Warren and there built a house, and then gone inland. The man killed had strayed from his companions, and the chief and his son had buried him upon a hill at a little distance. McClure investigated this matter thoroughly, but could not ascertain when the murder was committed, nor find the grave. He found, however, the remnants of two huts, which appeared to have been built long before Franklin's expedition set out.

All along this coast the natives were at first hostile, but invariably became friendly after a little maneuvering on the part of the interpreter, who generally succeeded in so ingratiating himself that the white men were treated kindly and often invited to partake of native hospitality. Arctic delicacies, such as salmon,

venison and blubber, were liberally bestowed upon the officers and crew. The interpreter so won over one old chief, that he was invited to remain with the tribe forever; as an inducement for him to do so, the chief's daughter, a pretty damsel of fifteen years, was propounded as a wife, with a dowry of a tent and a complete fitting out in the highest Esquimaux style.

On the 6th of September, high land was discovered to the north-east. Hitherto the Investigator had been sailing along a shore which had been traversed by Franklin, Back, Simpson, and others, on foot and in boats; but the land which now appeared on the left was *terra incognita*. McClure therefore hove anchor, and on landing took formal possession in the name of Queen Victoria, calling it "Baring's Island." It was afterwards discovered that they did not land on an island, but on the southern shore of Bank's Land. The name of the coast was accordingly changed to Baring's Land.

McClure now sailed along the easterly coast of Bank's Land, up Prince of Wales Strait, and on the 17th of September was within thirty miles of Melville Sound, whose waters connect with Barrow's Strait and Lancaster Sound. Here in latitude $73^{\circ} 10'$ and longitude $117^{\circ} 10'$ the ice in which the ship was beset ceased to drift to the north, new ice began to form, and everything indicated that the Investigator was fixed for the winter. Soon afterward, however, the ship was carried by a tumultuous drift of the ice thirty miles to the south, and on the 28th, was again swept northward in close proximity to the cliffs of Princess Royal Island. These cliffs rise perpendicularly from the sea to a height of four hundred feet,

and as the ship drifted towards them one old sailor remarked to a comrade:—"The old craft will double up like an old basket when she gets alongside of them rocks."

But a kind Providence saved the vessel, and she was swept past the island without striking the cliffs, and on the 30th of September brought up near the advanced position which she had reached on the 17th; and here the crew of the Investigator passed the winter of 1850-51.

On the 21st of October, 1850, McClure with six men and a sledge started in the direction of Melville Sound. On the 24th a cape was seen in the distance towards which their course was directed, and on the night of the 25th they encamped only two miles from it.

The next day opened with a cloudless sky, and McClure started early, hoping to obtain sight of a sea which would connect his discoveries with those of Parry. At an altitude of six hundred feet above the water-level, he impatiently waited for light enough to discover whether the long sought North-west passage from the Atlantic to the Pacific had been found.

As the sun's light increased the outline of the shores became distinctly visible. Bank's Land terminated about twelve miles away. At the north lay the frozen waters of Melville Sound, and the eyes of the eager beholders embraced a distance which precluded the possibility of any land lying in that direction between them and Melville Island. McClure was satisfied that he had discovered the North-west passage; he named the hill from which he gazed Mount Observation, and ascertained that it was in latitude $73^{\circ} 30'$, and longitude $114^{\circ} 39'$. From a point in

Melville Sound to be seen from Mount Observation, Parry had sailed eastward into Baffin's Bay and thence home; and McClure had sailed easterly from Bering's Strait almost to Parry's starting point and into waters connecting therewith. The great problem for the solution of which so many Arctic explorers had risked their lives was now solved.

A large cairn was erected, a record of the discovery placed therein, and then came the fatiguing return journey to the Investigator, during which McClure came near perishing. When within a few miles of the Investigator he pushed on ahead of his party who were slowly drawing the sledge, that he might tell his comrades the glorious news; but night overtook him ere he reached the vessel, and with it came a dense mist which obscured everything. He pushed on, guiding his course by the direction of the wind, until repeated falls over the rough ice admonished him of the danger of broken bones.

"I now climbed," says McClure, "on a mass of squeezed-up ice in the hope of seeing my party, should they pass near, or of attracting the attention of some one on board the vessel by firing my fowling-piece. Unfortunately I had no other ammunition than what it was loaded with. After waiting for an hour patiently, I was rejoiced to see through the mist the glare of a blue light, evidently burnt in the direction in which I had left the sledge. I immediately fired to denote my position, but my fire was unobserved, and both barrels being discharged I was unable to repeat the signal. My only hope now rested on the ship's answering, but nothing was to be seen, and there seemed no probability of my having any other shelter for the night than what the floe afforded.

"It was now half-past eight. There were eleven hours of night before me, a temperature 15° below zero, bears prowling about, and I with an unloaded gun in my hands. The sledge party might, however, reach the ship, and, finding I had not arrived, search would be made and help be sent; so I walked to and fro upon my hummock until, I suppose, it must have been eleven o'clock, when that hope fled likewise. Descending from the top of the slab of ice upon which I had clambered, I found under its lee a famous bed of soft, dry snow, and thoroughly tired out, I threw myself upon it and slept for perhaps three hours, when upon opening my eyes, I fancied I saw the flash of a rocket. Jumping upon my feet I found that the mist had cleared off, and that the stars and aurora borealis were shining in all the splendor of an Arctic night. Although unable to see the islands or the ship, I wandered about the ice in different directions until daylight, when, to my great mortification, I found I had passed the ship fully the distance of four miles."

McClure finally reached the Investigator before the arrival of the sledge-party, and great was the rejoicing on board at the news of the discovery of the Northwest passage.

During the winter and spring, sledge-parties were sent out in various directions, but no traces of Franklin were found and no important geographical discoveries made. Reindeer, musk-ox and other animals were occasionally met with all through the long Arctic night, and McClure concluded that it was a mistake to suppose that these inhabitants of the Arctic Archipelago migrated south to avoid the extreme cold of the winters.

In July, 1851, the ice-floe in which the ship had rested began to break up, and on the 17th the ship was once more free. But she enjoyed her liberty for only a short time, being soon captured by the pack-ice and again carried back and forth through Prince of Wales Strait as on the previous year. The situation was aggravating in the extreme. At times only twenty-five or thirty miles separated McClure and his crew from an open sea, through which, if they could only reach it, they might sail to Baffin's Bay and England the same summer. The alternative was to pass another gloomy and hazardous winter amid the ice.

But all attempts to get the ship further to the north-east than it was drifted by the ice proved unsuccessful; and it turned out that the North-west passage was not much of a passage after all, so far as the Investigator was concerned. The great trouble was, that an ice-bridge several miles in length obstructed the way.

McClure now decided to retrace his steps if possible to the southerly point of Banks' Land and to sail up its western coast. In this attempt he was so successful, that on the 19th of August he had passed Point Kellett, and was rapidly progressing northward through a lane of open water nearly five miles wide. Soon after this the lead became very narrow and much obstructed by floating ice, while the pack, between which and a precipitous coast they were sailing, was of fearful thickness—extending fifty feet below the water, which was very deep, and rising in places into hills a hundred feet high. The situation was full of peril, for had the ice set towards the abrupt cliffs along which they were sailing, nothing could have saved the ship.

On the 20th of August, the Investigator was fast between the ice and the beach at the north-west corner of Banks' Land, and remained so till the 29th, when the immense floe to which she had been fastened was raised edgewise out of the water by the crowding of the surrounding ice, and lifted perpendicularly some thirty feet close to the ship's bows. It seemed as if the ship must capsize, and had the ice toppled over, as appeared likely, it would have sunk her. But the floe, after frightful oscillations, righted itself and drifted onward. At another time the wreck of the Investigator seemed certain, and all that McClure could hope for was "that the ship might be thrown up sufficiently to serve as an asylum for the winter."

At length on the 24th of September, the explorers drifted into a large bay on the northern shores of Banks' Land, where they found a secure harbor, and here they passed the winter. In gratitude for past deliverances McClure called the place Mercy Bay. Game was abundant, and hunting parties rambled over the hills almost daily throughout the winter, excepting when prevented by occasional snow-storms, or when it was too dark for shooting. Some of the hills were three hundred feet high with wild and picturesque gorges between them. On their sides abundance of wood was found, and in many places layers of trees were visible, some protruding a dozen feet. One of the largest of these trunks measured nineteen inches in diameter.

The hunters met with various adventures, and one poor negro followed a wounded deer so far that he became bewildered and could not retrace his steps. He was so frightened out of his senses, that when found he stood crying, fancying himself frozen to

death, and could not be induced to make any exertion to return. In spite of his prayer to be let alone to die, his comrade carried and rolled him down the hills to the ship, where he soon recovered his strength and senses.

In April, 1852, a sledge journey was made across Banks' Strait to Winter Harbor on Melville Island, where Parry had wintered. Here a cairn was found containing information that Lieut. McClintock of the *Intrepid* had been there on a previous summer. In this same cairn McClure deposited a notice of his own visit, and of the situation of the *Investigator* at Mercy Bay. This information subsequently led to the rescue of himself and crew.

During the summer of 1852 the scurvy made its appearance among the crew. On the 1st of July six of the men were confined by it to their beds, and numbers more began to feel its symptoms. To add to their troubles the summer proved a very cold one, and before the close of July it became pretty manifest that the *Investigator* must spend another long winter's night in her present moorings. The grip of the ice was worse than the grip of the *Tartar*. During July and August the crew were daily employed in gathering sorrel which grew in the vicinity; eaten as a salad or boiled, it was found to be a most valuable anti-scorbutic, and proved an efficient medicine for the scurvy patients. Sledging parties were also sent out in hopes to accomplish the great mission of the *Investigator*—the finding of Franklin; but not a trace of his party was discovered.

“Although,” says McClure, “we had already been twelve months upon two-thirds allowance, it was necessary to make preparations for meeting eighteen

months more; a very severe deprivation and constitutional test, but one which the service we were employed upon called for, the vessel being as sound as the day she entered the ice; it would, therefore, be discreditable to desert her in 1853, when a favorable season would run her through the straits and admit of reaching England in safety, where the successful achievement of the long-sought-for and almost hopeless discovery of the North-west passage would be received with a satisfaction that would amply compensate for the sacrifices made and hardships endured in its most trying and tedious accomplishment."

In November the ship was hoisted over, and banked up with ice and snow, and preparations completed for spending a second winter at Mercy Bay. The crew kept up their spirits; hunting was again the order of the day; and deer, hares, and ptarmigan were plenty. Christmas was celebrated with great *eclat*, and all vied to make it a cheerful and happy one. Each mess was gayly illuminated, and decorated with original paintings by the lower-deck artist, exhibiting the ship in her perilous positions during the transit of the Polar Sea, and divers other subjects. Dainties in great profusion graced the lower deck, and a stranger witnessing the scene would hardly suppose that he saw a crew which had passed over two years in those dreary regions, depending entirely on their own resources.

So passed away the winter of 1852-3; and when spring came the men were all making preparations for carrying out a plan which McClure had previously decided on. One-half of the crew and some of the officers were to remain with the ship and endeavor to liberate it during the summer. The rest of the men

were to start for England—a part by way of Mackenzie River and Canada, and a part by way of Baffin's Bay. All were sad at the prospect of separation, for the sojourn and the journeys were alike full of gloom, and the death, April 5th, of a comrade who had poisoned himself, added to the general depression of spirits. But unexpected relief was at hand, and its arrival can be best described in McClure's own words:—

“While walking near the ship, in conversation with the first lieutenant upon the subject of digging a grave for the man who died yesterday, and discussing how we could cut a grave in the ground whilst it was so hardly frozen, we perceived a figure walking rapidly towards us from the rough ice at the entrance of the bay. From his pace and gestures we both naturally supposed, at first, that he was some one of our party pursued by a bear; but, as we approached him, doubts arose as to who it could be. He was certainly unlike any of our men; but, recollecting that it was possible some one might be trying a new traveling-dress preparatory to the departure of our sledges, and certain that no one else was near, we continued to advance.

“When within about two hundred yards of us, the strange figure threw up his arms, and made gesticulations resembling those used by Esquimaux, besides shouting at the top of his voice words which, from the wind and intense excitement of the moment, sounded like a wild screech: and this brought us both fairly to a stand-still. The stranger came quietly on, and we saw that his face was as black (from lamp-smoke) as ebony; and really, at the moment, we might be pardoned for wondering whether he was a denizen of this or the other world; as it was, we gallantly stood our ground, and, had the skies fallen upon us,

we could hardly have been more astonished than when the dark-faced stranger called out, 'I'm Lieutenant Pim, late of the Herald, and now in the Resolute. Captain Kellett is in her, at Dealy Island.'

"To rush at and seize him by the hand was the first impulse, for the heart was too full for the tongue to speak. The announcement of relief being close at hand, when none was supposed to be even within the Arctic Circle, was too sudden, unexpected, and joyous, for our minds to comprehend it at once. The news flew with lightning rapidity; the ship was all in commotion; the sick, forgetful of their maladies, leaped from their hammocks; the artificers dropped their tools, and the lower deck was cleared of men; for they all rushed for the hatchway, to be assured that a stranger was actually among them, and that his tale was true. Despondency fled the ship, and Lieut. Pim received a welcome—pure, hearty, and grateful—that he will surely remember and cherish to the end of his days."

Lieut. Pim's companions on this journey soon arrived at the ship, with the Fitzjames, a small sledge drawn by dogs. On the 8th of April they set out to return to the Resolute, accompanied by McClure and some of his men, and reached their ship on the 19th. On the 2d of May, an officer arrived from the Investigator with news of the death of two more of her crew. McClure, with the surgeon of the Resolute, then returned to his ship, intending to send home all the crew who were unfitted for service, and to allow such others as wished to accompany them to do so. With the balance he hoped to save his vessel; but on consulting the crew only four were willing to remain, although all the officers volunteered to stand

by their ship. After landing boats and stores for the use of Collinson, Franklin, or any other explorer, the colors were hoisted to the main-mast on the 3d of June, 1853, and the officers and crew, in all sixty men, bade farewell to the gallant Investigator and started for Dealy Island.

After sharing the fortunes of Captain Kellett's ships, the Resolute and Intrepid, until April, 1854, Captain McClure and his men started with sledges, for Beechey Island, where they took up quarters on the North Star. When that ship, later in the season, sailed for England with the crews of five deserted vessels, the brave discoverers of a North-west passage were among the number.

It will be remembered by the reader, that Captain Collinson of the Enterprise, not succeeding in entering the Polar Sea in the fall of 1850, went to Hong Kong to winter. In 1851 he sailed north, doubled Point Barrow, and following the track of the Investigator through the Continental Channel and up Prince of Wales Strait, penetrated a few miles further north than McClure had gone. But as no passage through the ice could be found, he sailed southerly and passed the winter of 1851-2 at Walker's Bay, on the eastern side of the entrance of Prince of Wales Strait. Search expeditions were sent out, and portions of Banks' Land, Albert Land, and Victoria Land examined.

During the next summer, Collinson took his ship southerly and easterly through Dolphin and Union Strait and Dease Strait, and passed the winter of 1852-3 at Cambridge Bay, on the southern coast of Victoria Land. From this point sledge parties were sent out to explore the western shores of Victoria Strait. Had they crossed this Strait to King William's Land,

their search for traces of the lost explorers would have been more successful.

Being unable to force a passage through the ice to the eastward the next season, Collinson started for Bering's Strait, but the *Enterprise* was caught in the ice before reaching Point Barrow, and a third winter was passed on the northern coast of America.

The exploits of McClure were duly appreciated by his countrymen. He received the honors of knighthood, and his commission as Captain was dated back to the day when, from a hill on Banks' Land, he gazed on a continuous ocean. Gold medals were awarded to him by the English and French Geographical Societies, and a select committee of the House of Commons resolved that the officers and crew of the *Investigator* "performed deeds of heroism which, though not accompanied by the excitement and the glory of the battle-field, yet rival in bravery and devotion to duty, the highest and most successful achievement of war." A reward of £10,000 was granted to them as a token of national approbation.

The recent death of Sir Robert McClure, which occurred October 17th, 1873, has occasioned an ill-timed controversy as to who is entitled to the honor of *first* discovering a North-west passage. Lady Franklin, in a letter to the *Times* published "before McClure's old comrades had had time to turn from the grave of the great explorer," claims the honor for the last survivors of her husband's expedition. The question is not a new one, but its discussion has been generally avoided by most of the Arctic writers, as they have felt that Franklin and McClure, if living, would have no dispute about so small a matter.

CHAPTER XXVI.

SEARCHES FOR SIR JOHN FRANKLIN.

(SECOND CRUISE OF THE PRINCE ALBERT.)

THE return of the Prince Albert in the fall of 1850 with relics of Franklin's party gave encouragement for a continuation of the search; and on the 3d of June, 1851, the same vessel again sailed for Prince Regent's Inlet. Captain Wm. Kennedy, formerly of the Hudson's Bay Company, commanded the schooner, and was assisted by Lieut. J. Bellot, an energetic and lively young officer of the French navy, whose love of adventure led him to offer his services to Lady Franklin.

The crew were all picked men, and included John Hepburn, Franklin's faithful attendant on his first overland journey, and other Arctic travelers. Never was a vessel manned with a more gallant or more resolute company. Lady Franklin herself was present to cheer and encourage the adventurers, as with the English flag at the peak, and the French flag, as a compliment to Bellot, at the fore, the Prince Albert went forth amid the prayers and best wishes of all England.

On arriving at the entrance to Prince Regent's Inlet that channel was found to be much obstructed

by ice; but Kennedy pushed boldly in, and penetrated southerly along the western coast as far as Fury Point. He was obliged, however, to beat a hasty retreat, to escape being crushed by the ice which began to drift toward the shore, and took refuge at Port Bowen on the eastern coast.

To winter at this place while all their searches were to be made on the western shore, was an idea not to be considered by Kennedy and Bellot. Accordingly on the 9th of September the attempt to find a harbor on the west side was renewed; and when near Port Leopold, Kennedy with four men succeeded in reaching the shore, and on ascending the cliffs of Cape Seppings, discovered that Port Leopold was free from ice and would afford a good winter harbor for the Prince Albert if it could be reached.

Descending to the shore, what was their consternation on finding that the narrow lane through which they had rowed their gutta-percha boat was completely closed, and that the whole pack was drifting down the inlet, carrying the ship with it. Little could be seen or heard but the tossing, roaring and grinding of huge masses of ice. Night was coming on, and to reach the ship was impossible. Nothing could be done but to make themselves as comfortable for the night as frozen clothes and cold winds would allow. The boat was hauled up on shore, and under its shelter, but without blankets or coverings of any kind, Kennedy and his men made the best of their situation. No one was permitted to sleep but an hour at a time for fear of being frozen.

With the dawn of day the shivering party ascended the highest cliff of Cape Seppings and strained their eyes in search of the Prince Albert. Not a sign of

the vessel was to be seen ; and here they were, alone on a bleak coast at the commencement of an Arctic winter, without shelter, provisions or fuel, and scantily clad. Fortunately, Kennedy was aware that two years before Sir James Ross had made a depot of provisions at Whaler Point on the other side of the harbor. To this depot the little company directed their way, and were overjoyed to find plenty of provisions and the canvas hut which Ross had erected.

"It was now," says Kennedy, "the 10th of September. Winter was evidently fast setting in, and, from the distance the ship had been carried during that disastrous night (whether out to sea or down the inlet we could not conjecture) there was no hope of our being able to rejoin her, at least during the present season. There remained, therefore, no alternative but to make up our minds to pass the winter, if necessary, where we were. The first object to be attended to was the erecting of some sort of shelter against the daily increasing inclemency of the weather ; and for this purpose the launch, left by Sir James Ross, was selected. Her mainmast was laid on supports at the bow and stern, about nine feet in height, and by spreading two of her sails over this a very tolerable roof was obtained. A stove was set up in the body of the boat, with the pipes running through the roof ; and we were soon sitting by a comfortable fire, which, after our long exposure to the wet and cold, we stood very much in need of."

Captain Kennedy was not the man to sit down idle and wait for something to turn up. He immediately began devising plans for future operations. The first thing was to search for the Prince Albert, and the second was to hunt for Franklin. Before either pro-

ject could be carried out it was necessary to provide some additional clothing and especially shoes. Material for both was at hand in the shape of canvas, and the party passed their days—Sundays excepted—in making it up. To their credit, be it said, that their Sabbaths were observed strictly as holy time, and He who had so wonderfully preserved them in their extremity was duly honored.

While thus busily employed in preparations for their exploring expeditions they were suddenly startled, on the 17th of October, by the firing of a gun in the direction of Cape Seppings. Rushing eagerly from their house they discovered seven of the Prince Albert's men, headed by Lieut. Bellot, who had come in search of their lost comrades. The mutual congratulations and thanksgivings can be better imagined than described. Bellot reported that the Prince Albert was securely moored in Batty Bay, and that he and his men had come up on the ice, dragging a boat with them for use if needed. Bellot had made two previous attempts to reach Port Leopold, but had been baffled once by deep snows, and again by weakness of the ice, through which the sledge broke and was lost.

Five weeks had elapsed since Bellot had taken French leave of his Captain, and unwillingly drifted off in the Prince Albert. They were weeks of anxiety, and the reaction of exuberant feeling was great. The night was spent under the covering of the old launch and her boards reverberated with sea songs and hearty laughs, while the lost and found drank hot chocolate and feasted on Arctic dainties.

On the 22d of October the whole party set out for Batty Bay, drawing provisions and Bellot's boat on a sledge made for the occasion. A mast was erected

and sails set, and at times, when the ice was smooth and the wind strong, the sledge, bearing all the travelers, sailed off with great rapidity. Unfortunately, however, it broke down when near the middle of the bay, and it was not safe to spend the night on the treacherous ice. Darkness overtook them before they reached land, and driving snow made progress both difficult and dangerous. Cold and tired they at length reached a flat lime-rock, where they spread a tent, kindled a fire, boiled some tea and made merry.

The tent proved too small to lodge thirteen men with any comfort to themselves, and Bellot, whose tact and good humor were unbounded, resolved "to make a night of it." Six men were arranged in a sitting posture on each side of the tent, and had between them a space about three feet wide in which to accommodate the legs of the twelve, and Bellot, who chose "a middle passage." All efforts to sleep were unsuccessful and songs and merriment prevailed. For the want of a candle-stick, each man was to hold the candle, for fifteen minutes, and then pass it to his neighbor. The candle at length giving out, the men tried to get a little rest, but Bellot's jokes were too good to allow it. He afterward referred to the night on the lime-stone rock, as one of enjoyment on a solid foundation. Sleeping in a tent was not repeated, but they passed several comfortable nights in snow houses, and on arriving at the ship were heartily welcomed by their comrades.

The ensuing winter was passed in the ice at Batty Bay; and though the night was long and dark, the cold winds howled around, and the drifting snow at times obstructed all out-door exercise, light, warmth and cheerfulness prevailed in the cabin of the Prince

Albert, and occasionally a mock-sun, or "sun-dog," dispelled the gloom.

On the 5th of January 1852, Kennedy, Bellot, and three of the crew, with a sledge drawn by dogs, started on an excursion to the south. As they approached Fury Beach the leaders impatiently pushed on ahead of the sledge, and on the evening of the 8th, stood upon the spot where they had hoped to find some of Franklin's party. "Every object distinguished by the moonlight in the distance," says Kennedy, "became animated, to our imaginations, into the forms of our long-absent countrymen; for, had they been imprisoned anywhere in the Arctic seas, within a reasonable distance of Fury Beach, here, we felt assured, some of them, at least, would have been now. But, alas for these fond hopes! All was solitary and desolate."

"Somerset House" was still in existence; with saddened feelings Kennedy and Bellot entered its cheerless apartments, and kindled a fire in the same stove which warmed the crew of Sir John Ross in the dreary winter of 1832-3. After eating their supper, they took a few hours repose; then started back towards the sledge party, and all returned to Batty Bay.

On the 25th of February, Kennedy again started south, with five men equipped with snow-shoes, sledges and dogs, and was overtaken a few days afterward at Fury Beach, by Bellot with seven men. After drawing largely on the old stores of the Fury, which were abundant and good, although thirty years had elapsed since they were left there, the whole party started southerly, on the "grand journey," as Bellot called it. On arriving at Brentford Bay, eight of the

men were sent back, and six men, with sledges drawn by dogs, continued the explorations.

Near this bay a strait running westward was found, which was named Bellot Strait. It separated North Somerset from Boothia Felix, and communicated with Victoria Strait. Kennedy passed through it, and then crossed Victoria Strait to Prince of Wales Land. After continuing westward for thirteen days and reaching longitude 100° west without coming to any sea, the party turned their course northward, and at last, on the 4th of May, arrived at Cape Walker at the northern extremity of Prince of Wales Land. But here, as at Fury Beach, they were much disappointed at finding no traces of Franklin's Expedition.

From Cape Walker the party started eastward, the stock of provisions running very low and some of the men being sick with the scurvy. On arriving at Cape McClintock, they were rejoiced to find a depot of provisions left there by Captain Ross in 1849. Continuing on, they arrived at Whaler Point on the 12th and remained there till the 27th, recruiting upon the stores and anti-scorbutics which were there found. On the 30th of May they reached their ship, after an absence of ninety-seven days, during which time they had traveled about eleven hundred miles.

The Prince Albert remained imprisoned in the ice until the 6th of August, and on being liberated sailed for home, arriving in England on the 7th of October, 1852.



CHAPTER XXVII.

SEARCHES FOR SIR JOHN FRANKLIN.

(EXPEDITIONS OF 1852.)

NOTWITHSTANDING the ill-success and disappointments which had thus far attended the searches for Franklin, the whole English nation was stimulated to make one more great effort for his rescue; and the spring of 1852 witnessed the departure from England of the largest expedition which had ever sailed for the Polar seas. It was commanded by Sir Edward Belcher, and comprised a squadron of three ships—the *Assistance*—the *Resolute*, Captain Kellett—the *North Star*, Captain Pullen; and two steamers—the *Pioneer*, Lieutenant Osborne—and the *Intrepid*, Captain McClintock. These five vessels left England on the 28th of April, and arrived at Beechey Island on the 10th of August.

At Beechey Island the ships separated. Belcher and Osborne, with the *Assistance* and *Pioneer*, proceeded up Wellington Channel; Kellett and McClintock, with the *Resolute* and *Intrepid*, sailed westerly toward Melville Island; and the *North Star* remained at Beechey Island as a depot-ship and retreat for any of the explorers who might need assistance.

Belcher's two ships came to anchor in Northum-

berland Sound on the western shores of Grinnell Land, in latitude $76^{\circ} 52'$, and here they remained through the winter. Exploring parties were sent out in every direction during the autumn and ensuing summer, who discovered and surveyed much new territory. Hopes of being on Franklin's track were occasionally raised from finding structures evidently erected by human hands but differing from anything which the Esquimaux were supposed to be familiar with. Belcher in describing one of his journeys says:—

“Our progress was tantalizing, and attended with deep interest and excitement. In the first place, I discovered, on the brow of a mountain about eight hundred feet above the sea, what appeared to be a recent and very workmanlike structure. This was a dome,—or rather a double cone, or ice-house,—built of very heavy and tabular slabs, which no single person could carry. It consisted of about forty courses, eight feet in diameter, and eight feet in depth, when cleared, but only five in height from the base of the upper cone as we opened it.

“Most carefully was every stone removed, every atom of moss or earth scrutinized; the stones at the bottom also taken up; but without finding a trace of any record, or of the structure having been used by any human being. It was filled by drift snow, but did not in any respect bear the appearance of having been built more than a season. This was named ‘Mount Discovery.’”

Soon afterward two structures were found which appeared to be graves. “Each,” says Belcher, “was like the dome, of large selected slabs, having at each end three separate stones, laid as we should place

BEECHY ISLAND.

THE ICE BARRIER.

head and foot stones. So thoroughly satisfied was I that there was no delusion, I desisted from disturbing a stone until it should be formally done by the party assembled.

“The evening following—for where the sun is so oppressive to the eyes by day we travel by night—we ascended the hill, and removed the stones. Not a trace of human beings!”

When the Assistance and Pioneer were freed from the ice, about the middle of July, Belcher started for Beechey Island; but before he could get there ice obstructed his passage, and his ships were frozen in for the winter of 1853–4 at Baring's Bay.

When spring came on, Belcher determined to get his whole command back to England that season; and when his two vessels were liberated from the ice, on the 6th of August, he again started for Beechey Island. But when nearly there an ice-floe, extending a distance of twenty miles between him and the open water of Barrow's Strait, arrested his progress; and believing that it would be impossible to get the Assistance and Pioneer through this ice, Belcher and his crews deserted them on the 26th of August 1854, and made their way to Beechey Island.

When Captain Kellet parted from Belcher at Beechey Island, in August 1852, he took the Resolute and Pioneer to their winter quarters at Dealy Island, off the south coast of Melville Island, and immediately sent out parties to deposit provisions along the coast for the searching expeditions of the ensuing spring. McClintock went northerly to Hecla and Griper Gulf, and Lieut. Meacham went westerly to Liddon Gulf. At Winter Harbor, Meacham visited “Parry's Sandstone,” and found on it a small cairn

which McClintock had erected the year before. On examining this cairn he found a copper cylinder, in which was a roll folded in a bladder. On opening this roll, Meacham, to his great astonishment, found that it had been left there April 28th, 1852, by McClure of the Investigator, and that it contained an account of the cruise of that ship since she left Bering's Strait in 1850.

This was a discovery indeed. The Investigator had not been heard from for two years, and here was information, in the hand-writing of her commander, that she was safely moored in Mercy Bay, on the opposite side of Banks' Strait, only six months previously. More than this—a North-west passage had been discovered. Meacham hastened back to his ship with the joyful news.

It was then too late in the season to undertake a journey to Mercy Bay, distant one hundred and seventy miles; but early the next spring, March 10th, 1853, a "forlorn hope" party of ten men, led by Lieut. Pim of the Resolute, started off across the strait to search for the Investigator. Little hope of finding McClure was entertained, as it was presumed he was no longer at Mercy Bay. The labor of dragging their large sledge over the broken ice and hummocks was most tedious and fatiguing; and when it finally broke down, Pim turned it back, and with two men and the little Fitzjames pushed briskly on.

Banks' Land was reached at last, and then, after many more days of weary travel, the Bay of Mercy came in view. No ship was seen; but as the party proceeded across the bay in search of records, something black was noticed in the distance. On looking at it through his glass, Pim decided that it was

ahead of his companions,
as already related.

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early in September they were again fast in the new ice. For two months the ships drifted back and forth with the floe, and then came to a stand-still in longitude 101° , at a place due east of Winter Harbor. Here they passed the winter of 1853-4. In the spring, searches for Franklin were renewed, and in April, Lieut. Meacham found at Princess Royal Island, documents left by Collinson in August, 1852.

On returning to the ships, Meacham found all hands busy preparing to abandon them, as peremptory orders to that effect had been received from Belcher. Everything about the vessels was put in perfect order; and then the hatches were calked down, and Kellett and his men started with sledges for Beechey Island where McClure and his crew had already gone.

On Belcher's arrival at Beechey Island, the officers and men of the five deserted ships took passage for home on the North Star. Just as they were starting, two vessels—the Phoenix and Talbot, bringing dispatches and supplies for Belcher—hove in sight. Thereupon, a portion of the men went aboard Captain

Inglefield's ships, and the three sailed for England, where they arrived September 28th, 1854.

Of the five vessels thus abandoned in 1853-4, only one has since been heard from. In September, 1855, as Captain James Buddington, commander of a New London whaler, was drifting in the ice of Baffin's Bay, he espied through his glass a ship some twenty miles off. For seven days the two ships gradually approached each other; then Buddington sent four of his men over the ice to find out what the craft was. As the party neared the stranger, after a day's journey, they found that she was fast in the ice, and apparently deserted, as they saw no one and received no answer to their shouts. A dread came over the men as they climbed upon her decks. Everything was in order; and over the helm was the motto, in letters of brass, "England expects every man to do his duty."

On descending to the cabin and striking a light, the mystery was solved, for there they found the log-book of the *Resolute*, which had broken from her icy fetters and drifted eastward into Baffin's Bay.

The interior of the *Resolute* was in a bad condition, but Buddington with ten of his crew carried her safely to New London after a most uncomfortable voyage. The sequel is an honor to both England and the United States. The former having released all her claims in favor of the salvors, Congress bought and refitted the *Resolute*, and sent her in charge of officers and sailors of the U. S. Navy, to England, where she was formally presented to Queen Victoria in December, 1856. The whole affair was well calculated to hasten an "era of good feeling" between these two nations.

CHAPTER XXVIII.

SEARCHES FOR SIR JOHN FRANKLIN.

(EXPEDITIONS OF CAPTAIN INGLESFIELD AND DR. RAE.)

CAPTAIN INGLESFIELD sailed from England July 6th, 1852, in the steamer Isabel, to ascertain if the belief of Sir John Ross that Franklin had lost his life on the western shores of Greenland was well founded.

On reaching Baffin's Bay, Inglesfield pushed boldly north to Smith's Sound and examined that noble channel—which had hitherto baffled explorers—as far north as $78^{\circ} 30'$. He was at first, deluded with the idea that he had found a climate milder than that of Baffin's Bay, but this delusion a violent storm soon dispelled. Very likely the storm proved his salvation, for otherwise he might have pushed on and been ice-anchored where escape would have been impossible, and the Isabel did not go prepared to pass an Arctic night.

The gale drove him back none too soon, for the cold soon became intense, and the spray froze as it broke on the land. Icebergs and loose cakes of ice were all around the Isabel and it was only by getting up steam by the aid of blubber that she forced a way out of her difficulties.

Inglesfield arrived in England Nov. 4th, 1852. His

trip was a short one, but it was remarkably successful, so far as its immediate object was concerned.

Early in 1853, Captain Inglefield was again sent out in command of the *Phoenix* and *Lady Franklin*, to reinforce Belcher's squadron. Lieut. Bellot, the gallant young Frenchman who had figured so conspicuously in the voyage of the *Prince Albert*, accompanied Capt. Inglefield, and the saddest incident connected with the expedition was the death of this hero. In August, 1853; Bellot volunteered to carry dispatches from Captain Pullen of the *North Star*, over the ice to Sir Edward Belcher, who was at that time near Cape Beecher in Wellington Channel, and started from Beechey Island August 12th, with four men named Harvey, Johnson, Madden, and Hook. The ice at this season of the year is always treacherous, and Bellot was cautioned to keep as close as possible to the eastern shore of Wellington Channel. He encouraged his men with his usual hilarity, and put his own shoulder to the tracking lines as they plodded along on the ice.

Approaching Cape Grinnell, Bellot found that there was a broad belt of water between the ice and the shore. Nothing daunted he pushed out with his India-rubber boat, to convey a line to the cape by which the remainder of the party and the provisions could be dragged over; but the wind blew furiously and he could not, alone, make headway. Accordingly he remained on the ice, and ordered Harvey and Madden to cross over with the line, which they successfully accomplished. Madden remained on the shore to hold the line, and three boat loads of provisions had been conveyed across the water when the ice was discovered to be on the move. Harvey and

Madden were both at this time on the land, but of course could not hold on to the line, though Madden did not let go till hauled into the water up to his waist, when Bellot called to him to let her slide. Bellot, Johnson and Hook were now drifting to sea on a floe of ice, with a bitter wind driving them further and further from hope of escape. Madden and Harvey for two hours watched their companions drifting away, powerless to render them any assistance, and then began to retrace their steps to the ship. Taking what provisions they could carry, they walked around Griffin Bay and were rounding Cape Bowden, when to their surprise they met their lost companions Johnson and Hook, whose sad countenances too plainly told the story of the third, the brave and gleeful Lieutenant.

The account they gave of Bellot's sad fate was briefly this. After finding themselves fairly afloat, they made an ice house which might protect them from the wind, Bellot cheerfully remarking, "When the Lord protects us not a hair of our heads shall be touched." They talked over the danger of their situation calmly for half an hour, when Bellot said he would go out and see how the ice was drifting. In a few minutes Johnson followed but could see nothing of the Lieutenant, but there was a crack in the ice near by, some five fathoms wide, and on the opposite side the crack lay Bellot's stick. The wind was blowing a gale, and the gallant Frenchman was probably blown into the water, and drifted under the ice. His companions shouted "Bellot! Bellot!" but there was no response. The floe drifted to Point Hogarth, when Johnson and Hook made their escape to terra firma.

“Poor Bellot !” “Poor Bellot !” was the exclamation of all, Esquimaux included, as they learned his untimely end. His was a generous, noble nature. With sincere sympathy for Lady Franklin, he entered the English service for the sole purpose of aiding in the discovery of her noble husband ; and of the many who are buried in the waters and frost-bound lands of the Arctic regions, the memory of none is cherished more ardently by his companions than Lieutenant Bellot. England showed her appreciation of his services by a liberal subscription to his family and by a monument to his memory in Greenwich Hospital.

Inglefield returned to England in the autumn of 1853. He was accompanied by Lieut. Creswell of the Investigator, who carried home dispatches announcing the discovery of a North-west Passage.

In 1853, Dr. Rae, who had made a land expedition in 1851 in which he had thoroughly explored the coast of North America as far east as longitude 110°, was induced to undertake a similar expedition under the auspices of the Hudson’s Bay Company. His former survey had made him thoroughly acquainted with the coast, and had proved that he was the right man to head another expedition. In this year he however advanced only as far as Repulse Bay, which he reached on the 15th of August, and then went into winter-quarters. His researches the succeeding summer, and his important discoveries, which proved to be the key that unlocked the mysterious fate of Sir John Franklin, are related in a succeeding chapter.

CHAPTER XXIX.

THE FIRST AMERICAN EXPEDITION.

WHEN the year 1848 had arrived without any tidings of Sir John Franklin or his party, Great Britain, as heretofore stated, dispatched three expeditions to look for them. But peculiar drawbacks seemed to attend their efforts, and before the beginning of 1850 they had all abandoned the search, almost without attaining the first threshold of inquiry.

Their failure aroused every where the generous sympathies of men. Science felt for its votaries, humanity mourned its fellows, and an impulse, holier and more energetic than either, invoked a crusade of rescue. That admirable woman, the wife of Sir John Franklin, not content with stimulating the renewed efforts of her own countrymen, claimed the co-operation of the world. In letters to the President of the United States, full of the eloquence of feeling, she called on us, as a "kindred people, to join heart and hand in the enterprise of snatching the lost navigators from a dreary grave."

The delays incident to much of our national legislation menaced the defeat of her appeal. The bill making appropriations for the outfit of an expedition lingered on its passage, and the season for commencing operations had nearly gone by.

At this juncture, a noble-spirited merchant of New York fitted out two of his own vessels and proffered them gratuitously to the government. Thus prompted by the munificent liberality of Mr. Grinnell, Congress hastened to take the expedition under its charge, and authorized the president to detail from the navy such necessary officers and seamen as might be willing to engage in it. The command was given to Lieutenant Edwin De Haven, and the two vessels, named "Advance" and "Rescue," sailed from New York on the 22d day of May, 1850.

Dr. Elisha Kent Kane, a native of Philadelphia, already distinguished for his world-wide travels, scientific enthusiasm and gallant bearing, having repeatedly volunteered for the service, accompanied the expedition as its senior medical officer and naturalist, and on his return published its history in the form of a "Personal Narrative." From this work we give, by permission, in Dr. Kane's own words, a condensed account of the

UNITED STATES GRINNELL EXPEDITION.

On the 12th of May, while bathing in the tepid waters of the Gulf of Mexico, I received one of those courteous little epistles from Washington which the electric telegraph has made so familiar to naval officers. It detached me from the coast survey, and ordered me to "proceed forthwith to New York, for duty upon the Arctic Expedition."

Seven and a half days later, I had accomplished my overland journey of thirteen hundred miles, and in hours more our squadron was beyond the limits of the United States: the Department had calculated traveling time to a nicety.

A very few books and a stock of coarse woollen clothing, re-enforced by a magnificent robe of wolf-skins, that had wandered down to me from the snow-drifts of Utah, constituted my entire outfit; and with these I made my report to Commodore Salter at the Brooklyn Navy Yard.

Almost within the shadow of the line-of-battle ship North Carolina, their hulls completely hidden beneath a projecting wharf, were two little hermaphrodite brigs. Their spars had no man-of-war trigness; their decks were choked with half-stowed cargo; and for size, I felt as if I could straddle from the main hatch to the bulwarks.

At this first sight of the Grinnell Expedition, I confess that the fastidious experience of naval life on board frigates and corvettes made me look down on these humble vessels. They seemed to me more like a couple of coasting schooners than a national squadron bound for a perilous and distant sea. Many a time afterward I recalled the short-sighted ignorance of these first impressions, when some rude encounter with the ice made comfort and dignity very secondary thoughts.

The "Advance," my immediate home, had been originally intended for the transport of machinery. Her timbers were heavily moulded, and her fastenings of the most careful sort. She was fifty-three tons larger than her consort, the "Rescue;" yet both together barely equaled two hundred and thirty-five tons.

Of my brother officers I can not say a word. I am so intimately bound to them by the kindly and unbroken associations of friend and mess-mate, that I shrink from any other mention of them than such as my narrative requires. All told, our little corps of

officers numbered four for each ship, including that non-effective limb, the doctor. Our two crews, with the aid of a cook and steward, counted twelve and thirteen; giving a total of but thirty-three.

ADVANCE.

Officers.

Lieutenant Commanding—Edwin J. De Haven, commanding the expedition.

Passed Midshipman—William H. Murdaugh, acting master and first officer.

Midshipman—William I. Lovell, second officer.

E. K. Kane, M.D., passed assistant surgeon.

RESCUE.

Officers.

Acting Master—Samuel P. Griffin, commanding the Rescue.

Passed Midshipman—Robert R. Carter, acting master and first officer.

Boatswain—Henry Brooks, second officer.

Benjamin Vreeland, M.D., assistant surgeon.

ABOUT one o'clock on the 22d of May, the asthmatic old steam-tug that was to be our escort to the sea moved slowly off. Our adieux from the Navy Yard were silent enough. We cost our country no complimentary gunpowder; and it was not until we got abreast of the city that the crowded wharves and shipping showed how much that bigger community sympathized with our undertaking. Cheers and hurrahs followed us till we had passed the Battery, and the ferry-boats and steamers came out of their track to salute us in the bay.

The sky was overcast before we lost sight of the spire of old Trinity; and by evening it had clouded over so rapidly, that it was evident we had to look for a pretty night outside. Off Sandy Hook the wind freshened, and the sea grew so rough, that we were forced to part abruptly from the friends who had kept us

ADVANCE AND RESCUE AT NAVY-YARD.

OUR FIRST ICEBERG.

company. We were eating and drinking in our little cabin, when the summons came for them to hurry up instantly and leap aboard the boat. The same heavy squall which made us cast loose so suddenly the cable of the steamer gathered upon us the night and the storm together; and in a few minutes our transition was complete, from harbor life and home associations to the discomforts and hardships of our career.

The difference struck me, and not quite pleasantly, as I climbed over straw and rubbish into the little *peculium* which was to be my resting-place for so long a time. The cabin, which made the homestead of four human beings, was somewhat less in dimensions than a penitentiary cell. There was just room enough for two berths of six feet each on a side; and the area between, which is known to naval men as "the country," seemed completely filled up with the hinged table, the four camp-stools, and the lockers. A hanging lamp, that creaked uneasily on its "gimbals," illustrated through the mist some long rows of crockery shelves and the dripping step-ladder that led directly from the wet deck above. Every thing spoke of cheerless discomfort and narrow restraint.

By the next day the storm had abated. We were out of sight of land, but had not yet parted with the last of our well-wishers. A beautiful pilot-boat, the *Washington*, with Mr. Grinnell and his sons on board continued to bear us company. But on the 25th we saw the white flag hoisted as the signal of farewell. We closed up our letters and took them aboard, drank healths, shook hands—and the wind being fair, were out of sight of the schooner before evening.

I now began, with an instinct of future exigencies, to fortify my retreat. The only spot I could call my

own was the berth I have spoken of before. It was a sort of *bunk*—a right-angled excavation, of six feet by two feet eight in horizontal dimensions, let into the side of the vessel, with a height of something less than a yard. My first care was to keep water out, my second to make it warm. A bundle of tacks, and a few yards of India-rubber cloth, soon made me an impenetrable casing over the entire wood-work. Upon this were laid my Mormon wolf-skin and a somewhat ostentatious Astracan fur cloak, a relic of former travel. Two little wooden shelves held my scanty library; a third supported a reading lamp, or, upon occasion, a Berzelius' argand, to be lighted when the dampness made an increase of heat necessary. My watch ticked from its particular nail, and a more noiseless monitor, my thermometer, occupied another. My ink-bottle was suspended, pendulum fashion, from a hook, and to one long string was fastened, like the ladle of a street-pump, my entire toilet, a tooth-brush, a comb, and a hair-brush.

Now, when all these distributions had been happily accomplished, and I crawled in from the wet, and cold, and disorder of without, through a slit in the India-rubber cloth, to the very centre of my complicated resources, it would be hard for any one to realize the quantity of comfort which I felt I had manufactured. My lamp burned brightly; little or no water distilled from the roof; my furs warmed me into satisfaction; and I realized that I was sweating myself out of my preliminary cold, and could temper down at pleasure the abruptness of my acclimation.

From this time I began my journal. At first its entries were little else than a selfish record of personal discomforts. It was less than a fortnight since I was

under the sky of Florida, looking out on the live oak with its bearded moss, and breathing the magnolia. Comfortable as my bunk was, compared with the deck, I was conscious that, on the whole, I had not bettered my quarters.

But with the 7th of June came fine, bright, bracing weather. We were off Newfoundland, getting along well over a smooth sea. We had been looking at the low hills near Cape Race, when, about noon, a great mass of whiteness was seen floating in the sunshine. It was our first iceberg. It was in shape an oblong cube, and about twice as large as Girard College. Its color was an unmixed, but not dazzling white: indeed, it seemed entirely coated with snow of such unsullied, unreflecting purity, that, as we passed within a hundred yards of it, not a glitter reached us. It reminded me of a great marble monolith, only awaiting the chisel to stand out in peristyle and pediment a floating Parthenon. There was something very imposing in the impassive tranquillity with which it received the lashings of the sea.

The next day we were off St. John's, surrounded by bergs, which nearly blockaded the harbor. A boat's crew of six brawny Saxon men rowed out nine miles to meet us, and offer their services as pilots. They were disappointed when we told them we were "bound for Greenland;" but their hearty countenances brightened into a glow when we added, "in search of Sir John Franklin."

We ran into an iceberg the night after, and carried away our jib-boom and martingale: it was our first adventure with these mountains of the sea. We thumped against it for a few seconds, but slid off smoothly enough into open water afterward.

WE were now drawing near to Davis's Straits, and the names which recorded our progress upon the charts were full of Arctic associations. The *Meta Incognita* of Frobisher and the Cape of God's Mercy greeted us from the American coast: Cape Farewell was on our starboard quarter, and the "Land of Desolation" nearly abeam.

Our enemies, the icebergs—for we had not yet learned to regard them as friends—made their appearance again on the 16th. One of them was an irregular quadrangle, at least a quarter of a mile long in its presenting face.

The night had now left us: we were in the continuous sunlight of the Arctic summer. I copy the entries from my journal of the 17th.

"We are just 'turning in,' that is, seeking our den for sleep. It has been a long day, but to me a God-send, so clear and fogless. My time-piece points to half past nine, and yet the sunshine is streaming down the little hatchway.

"Our Arctic day has commenced. Last night we read the thermometer without a lantern, and the binnacle was not lighted up. To-day the sun sets after ten, to rise again before two; and during the bright twilight interval he will dip but a few degrees below the horizon. We have followed him for some time past in one scarcely varying track of brightness. The words night and day begin to puzzle me, as I recognize the arbitrary character of the hour cycles that have borne these names. Indeed, I miss that soothing tranquillizer, the dear old darkness, and can hardly, as I give way to sleep, bid the mental good-night which travelers like to send from their darkened pillows to friends at home.

THE BUNKERTOPPEN.

ENTERING DISCO.



DISCO HUTS.

On the 20th an unknown schooner came within the same dome of mist with ourselves. We had not seen a sail since leaving Newfoundland, and the sight pleased us. We showed our colors, but the little craft declined a reciprocation.

On the same day, jutting up above the misty horizon, we sighted the mountainous coast of Greenland. It was a bold antiphrasis that gave such a vernal title to this birth-place of icebergs. Old Crantz, the quaintest, and, in many things, the most exact of the missionary authorities, says that it got the name from the Norsemen, because it was greener than Iceland—a poor compliment, certainly, to the land of the Geysers!

We first made the coast near Sukkertoppen, a remarkable peak, called so, perhaps, because its form is not unlike that of a sugar-loaf, perhaps because its top is whitened with the snow. Mountains that mark their unbroken profile on the distant sky are very apt to suggest these fanciful remembrances to the navigator; and it is probably this which makes their names so frequently characteristic.

This peak is a noted landmark, and gives its name to the entire district it overlooks. Our own observations confirm those of Graah and Ross, which place it in latitude $65^{\circ} 22'$ north, longitude $53^{\circ} 05'$ west. It may be seen under ordinary circumstances many miles out to sea.

We were favored in our view of the Sukkertoppen. We had approached it through an atmosphere of fog; and when the morning of the 23d gave us a clear sky, we found ourselves close upon the beach, so close that we could see the white surf mingling with the snow streaks. A more rugged and inhospitable region never met my eye. Its unyielding expression differed from

any that belongs to the recognized desert, the Sahara, or the South American Arridas; for in these tropical wastes there is rarely wanting some group of Euphorbia or stunted Gum Arabic trees, to qualify by their contrast the general barrenness. It was startling to see, beneath a smiling sun and upon the level of the all-fertilizing sea, an entire country without an apparent trace of vegetable life.

On the 24th, the sun did not pass below the horizon. We had already begun to realize that power of adaptation to a new state of things, which seems to be a distinguishing characteristic of man. We marked our day by its routine. Though the temptation to avoid a regular bed-hour was sometimes irresistible, yet seven bells always found us washing by turns at our one tin wash-basin: at eight bells we breakfasted; at eight again we called to grog; two hours afterward we met at dinner; and at six o'clock in the afternoon we came with laudable regularity to our salt junk and coffee.

Our daily reckoning kept us advised of the recurring noonday, the meridian starting-point of sea-life; and our indefatigable master had his unvarying hour for winding up and comparing the chronometers. It is hard not to mark the regulated steps of time, where such a man-of-war routine prevails; and I can scarcely understand the necessity for the twenty-four hours' registering dial-plate, which Parry and others carried with them, to avert the disastrous consequences of a twelve hours' skip in their polar reckonings.

We had now been a month and a day out from New York. Our immediate destination was the Crown Prince Islands, more generally known by the misnomer of the Whale Fish. This little group is situated

in the Bay of Disco, thirty miles south of the island of that name.

The entrance to the anchorage from the southwest is between two islands, and the harbor, which is completely sheltered from ice, is formed, as will be seen from the sketch, by the conjunction of a third. On turning the corner, we suddenly came upon a wooden store-house for oil and skins; and opposite to it, a clumsy-looking collier, moored stem and stern by hawsers leading to rocks on either side of the channel. Soon after, we were boarded by Lieutenant Power, of the British navy, and from him we learned that the clumsy craft was the Emma Eugenia, a provision transport chartered by the Admiralty, and that in less than a week she would take our letters to England.

We learned, too, that the British relief squadron under Commodore Austin had sailed the day before for the regions of search. They had left England on the 6th of May, or seventeen days before our own departure from New York.

While we were standing upon deck, waiting for the boat to be manned which was to take us to the shore, something like a large Newfoundland dog was seen moving rapidly through the water. As it approached, we could see a horn-like prolongation bulging from its chest, and every now and then a queer movement, as of two flapping wings, which, acting alternately on either side, seemed to urge it through the water. Almost immediately it was alongside of us, and then we realized what was the much talked-of kayak of the Greenlanders.

It was a canoe-shaped frame-work, carefully and *entirely* covered with tensely-stretched seal-skins, beautiful in model, and graceful as the nautilus, to which

it has been compared. With the exception of an elliptical hole, nearly in its centre, to receive its occupant, it was both air and water tight. Into this hole was wedged its human freight, a black-locked Esquimaux, enveloped in an undressed seal-skin, drawn tightly around the head and wrists, and fastened, where it met the kayak, about an elevated rim made for the purpose, over which it slipped like a bladder over the lip of a jar.

The length of the kayak was about eighteen feet, tapering fore and aft to an absolute point. The beam was but twenty-one inches. When laden, as we saw it, the top or deck was at its centre but two inches by measurement above the water-line. The waves often broke completely over it. A double-bladed oar, grasped in the middle, was the sole propeller. It was wonderful to see how rapidly the will of the kayacker communicated itself to his little bark. One impulse seemed to control both. Indeed, even for a careful observer, it was hard to say where the boat ended or the man commenced; the rider seemed one with his frail craft, an amphibious realization of the centaur, or a practical improvement upon the merman.

These boats, not only as specimens of beautiful naval architecture, but from their controlling influence upon the fortunes of their owners, became to me subjects of careful study. I will revert to them at another time. As we rowed to the shore, crowds of them followed us, hanging like Mother Carey's chickens in our wake, and just outside the sweep of our oars.

We landed at a small cove formed by two protruding masses of coarsely granular feldspar. Some forty odd souls, the men, women, and children of the entire settlement, received us. The men were in the front

rank ; the women, with their infants on their backs, came next : and behind them, in yelling phalanx, the children. Still further back were crowds of dogs, seated on their haunches, and howling in unison with their masters.

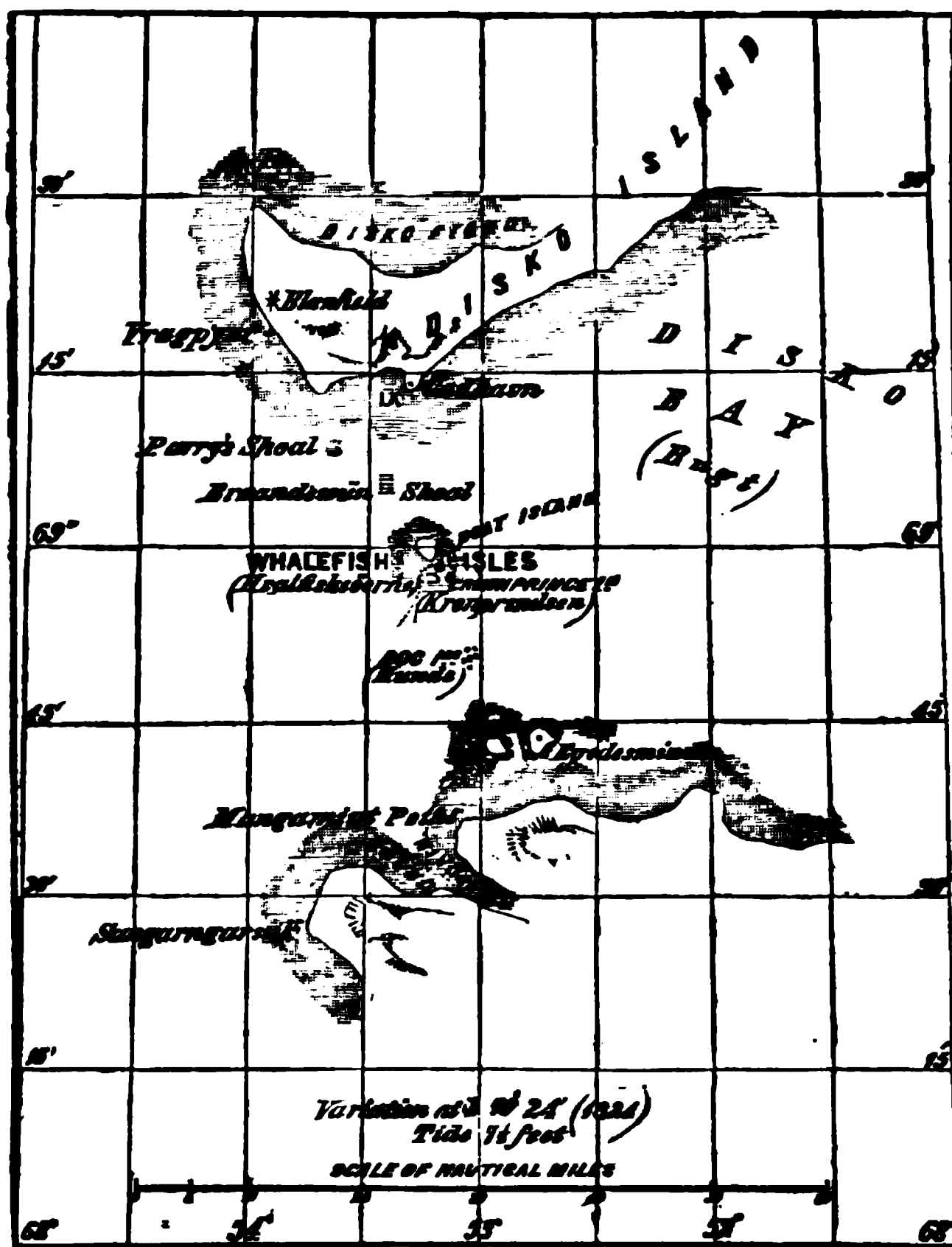
The one feeling which, I venture to say, pervaded us all, to the momentary exclusion of every thing else, was disgust. Offal was strewn around without regard to position ; scabs of drying seal-meat were spread over the rocks ; oil and blubber smeared every thing, from the dogs' coats to their masters' ; animal refuse tainted all we saw ; and we afterward found, while botanizing among the snow valleys, bones of the seal, walrus, and whale, buried in the mosses.

But if filth characterized the open air, what was it in the habitations ! One poor family had escaped to their summer tent, pitched upon an adjacent rock that overlooked the sea. Within a little area of six feet by eight, I counted a father, mother, grandfather, and four children, a tea-kettle, a rude box, two rifles, and a litter of puppies.

This island is used by the Danes as a sort of fishing station, where one European, generally a carpenter or cooper, presides over a few families of Esquimaux, who live by the chase of the seal. This functionary had a hut built of timber, which we visited. Except the oil-house, which we had observed before, it was the only wooden edifice.

The natives, if the amalgamation of Dane and Esquimaux can be called such, spend their summer in the reindeer tent, their winters in the semi-subterranean hut. These last have not been materially improved since the days of Egede and Fabricius. A square inclosure of stone or turf is raftered over with

drift-wood or whalebones, and then roofed in with earth, skins, mosses, and broken-up kayack frames. One small aperture of eighteen inches square, covered with the scraped intestines of the seal, forms the window; and a long, tunnel-like entry, opening to the south, and not exceeding three feet in height, leads to a skin-covered door. Inside, perched upon an elevated dais or stall, with an earthen lamp to establish the "focus," several families reside together.



Our commander intended to remain at the Crown Prince Islands no longer than was absolutely necessary for our consort, the Rescue, to rejoin us; but, upon reviewing our hurried preparation for the hardships of the winter, he determined, with characteristic forethought, to send a boat party to the settlement of Lievely, or Godhavn, on the neighboring island of Disco, for the double purpose of collecting information and purchasing a stock of furs. The execution of this duty he devolved upon me.

We started on the 27th, Mr. Lovell, myself, an Esquimaux pilot, and a crew of five men. As we rowed along the narrow channels before we emerged from this rocky group, I observed for the first time that extreme transparency of the water which has so often been alluded to by authors as characteristic of the Polar Seas. At the depth of ten fathoms every feature of the bottom was distinctly visible.

Even for one who has seen the crimson dulse and coral groves of the equatorial zones, this arctic growth had its rival beauties. Enormous bottle-green fronds were waving their ungainly lengths above a labyrinthine jungle of snake-like stems; and far down, where the claws of the fucus had grappled the round gneisses, great glaring lime patches shone like upset white-wash upon a home grassplot.

It was a rough sail outside. The bergs were numerous; and the heavy sea way and eddying current, sweeping like a mill-race along the southern face of the island, made us barely able to double the entrance to the little harbor. We did double it, however, and by a sudden transition found ourselves in a quiet land-locked basin, shadowed by wall-like hills.

Snow, as usual, covered the lower slopes; but, cheer-

ful in spite of its cold envelope, rose a group of rude houses, mottling the sky with the comfortable smoke of their huge chimneys. Among the most conspicuous of these was one antique and gable fronted, with timbers so heavy and besmeared with tar, that it seemed as if built from the stranded wreck of a vessel. Little man-of-war port-holes, recessed into its wooden sides, and a flag-staff, as tall as the mast of a jolly-boat, gave it dignity. This was the house of the "Royal Inspector of the Northern portions of Davis's Straits;" whose occupant—well and kindly remembered by all of us—no less than the royal inspector himself, stood awaiting our landing.

The incumbent, Mr. Olrik, was an accomplished and hospitable gentleman, well read in the natural sciences, and an acute observer. In a few minutes we were seated by a ponderous stove, and in a few more discussing a hot Eider duck and a bottle of Latour.

Upon commencing my negotiations as to furs, the object of my journey, I learned that the reindeer do not abound on the island of Disco as in the days of Crantz and Egedé; though to the south, about Bunkë Land, and the fiords around Holsteinberg, and to the north of the Waigat, they are still very numerous. Nevertheless, by drumming up the resources of the settlement, we obtained a supply of second-hand *late summer* skins; and with these, aided by the seal, soon fitted out a wardrobe.

Of Disco, save its Esquimaux huts, its oil-house, its smith-shop, its little school, and its gubernatorial mansion, I can say but little. It is the largest circum-navigable island on the coast of Greenland. Its long diameter is from the northwest to southeast, and its eastern edge is in a continuous line with the coast to

INSPECTORS' HOUSE, LIEVELY.

AMONG THE BERGS.

GROUP OF SEALS.

the north and south. It is rendered insular by a large strait, called the Waigat, which inosculates with the bay.

So much for Disco. Paul Zachareus, long-haired, swarthy, Christian Paul, said that the wind was fair: Lovell, like a good sailor, exercised his authority over the doctor: the furs were packed, my sketches and *wet hortus siccus* properly combined, and we started again for our little brig.

We left the Whale-fish Islands on the 29th, in company with the Rescue. On the 30th we doubled the southwest cape of Disco, and stood to the northward, through a crowd of noble icebergs. On the first of July, early in the morning, we encountered our first field-ice. From this date really commenced the characteristic voyaging of a Polar cruise.

CHAPTER XXX.
THE FIRST AMERICAN EXPEDITION.
(CONTINUED.)

“July 1. This morning was called on deck at 4 A.M. by our commander.

“About two hundred yards to the windward, forming a lee-shore, was a vast plane of undulating ice, in nowise differing from that which we see in the Delaware when mid-winter is contending with the ice-boats. There was the same crackling, and grinding, and splashing, but the indefinite extent—an ocean instead of a river—multiplied it to a din unspeakable; and with it came a strange undertone accompaniment, a not discordant drone. This was the floe ice; perhaps a tongue from the ‘Great Pack,’ through which we are now every day expecting to force our way. A great number of bergs, of shapes the most simple and most complicated, of colors blue, white, and earth-stained, were tangled in this floating field. Such, however, was the inertia of the huge masses, that the sheet ice piled itself up about them as on fixed rocks.

“The sea immediately around, saving the groundswell, was smooth as a mill-pond; but it was studded over with dark, protruding little globules, about the size of hens’ eggs, producing an effect like the dimples of so many overgrown rain-drops fallen on the water. These, as I afterward found, were rounded fragments of transparent and fresh-water ice, the debris and de-

GLACIERS OF JACOB'S BIGHT.

IN A FOG.

tritus of the bergs. We sailed along this field about ten miles.

"At 9 P.M. the fogs settled around us, and we entered again upon an area full of floating masses of berg. As it was impossible to avoid them, they gave us some heavy thumps.

"At 11 we cleared the floes, and, favored with a free wind, found ourselves nearly opposite Omenak's Fiord, a noted seat of iceberg growth and distribution."

How far we were from land I could not tell; but we saw distinctly the configuration of the hills and the deep recesses of the fiord. The sun, although nearing midnight, was five degrees above the horizon, and threw its rich coloring over the snow. Many large bergs were moving in procession from the fiord, those in the foreground in full sunshine, those in the distance obscured by the shadow of their parent hills.

Omenak's Fiord, known as Jacob's Bight, is one of the largest of those strange clefts, which, penetrating the mountain range at right angles to its long axis, form so majestic a feature of Greenland scenery. Its inland termination has never been reached; and it is supposed by Scoresby to be continuous with the large sounds, which on a corresponding parallel ($70^{\circ} 40'$) enter from the eastern coast.

It is up this fiord, probably in the chasms of the trap, that those enormous glaciers accumulate which have made Jacob's Bight, perhaps, the most remarkable locality in the *genesis* of icebergs on the face of the globe. It is not uncommon to have the shore here completely blocked in by these gigantic monsters: I myself counted in one evening, the 3d of July, no less than two hundred and forty of primary magnitude, from the decks of our vessel.

The glaciers which abut upon this sound are probably offsets from an interior *mer de glace*. The valleys or canals which conduct these offsets were described to me as singularly rectilinear and uniform in diameter, a fact which derives ready confirmation from the known configuration of a dioritic country. Now the protrusion of these abutting faces into the waters of the sound has been a subject of observation among both Danes and Esquimaux. Places about Jacob's Harbor, remembered as the former seats of habitation, are now overrun by glaciers; and Mr. Olrik told me of a naked escarpment of ice, twelve hundred feet high, which he had seen protruding nearly half a mile into the sea.

The materials thus afforded in redundant profusion are rapidly converted into icebergs. The water at the bases of these cliffs is very deep—I have in my notebook well-established instances of three hundred fathoms; and the pyramidal structure of the trap is such as to favor a precipitous coast line. The glacier, thus exposed to a saline water base of a temperature above the freezing point, and to an undermining wave action, aided by tides and winds, is of course speedily detached by its own gravitation.

July 2. The next day we passed this fiord and stood on our course beyond an imposing headland, known on the charts as Cape Cranstown, through a sea unobstructed by floe ice, but abounding in bergs.

In the afternoon the wind subsided into a mere cat's-paw, and we were enabled to visit several of the icebergs. Certain it is that no objects ever impressed me more. There was something about them so slumberous and so pure, so massive yet so evanescent, so majestic in their cheerless beauty, without, after all,

any of the salient points which give character to description, that they almost seemed to me the material for a dream, rather than things to be definitely painted in words.

The first that we approached was entirely inaccessible. Our commander, in whose estimates of distance and magnitude I have great confidence, made it nearly a mile in circumference.

The next was a monster ice mountain, at least two hundred feet high, irregularly polyhedral in shape, and its surface diversified with hill and dale. Upon this one we landed. I had never appreciated before the glorious variety of iceberg scenery. The sea at the base of this berg was dashing into hollow caves of pure and intense ultramarine; and to leeward the quiet water lit the eye down to a long, spindle-shaped root of milky whiteness, which seemed to dye the sea as it descended, until the blue and white were mixed in a pale turkois. Above, and high enough to give an expression akin to sublimity, were bristling crags.

The general color of a berg I have before compared to frosted silver. But when its fractures are very extensive, the exposed faces have a very brilliant lustre. Nothing can be more exquisite than a fresh, cleanly-fractured berg surface.

Voyagers speak of the effects of Arctic refraction in language as exact and mathematical as their own correction tables. It almost seems as if their minute observations of dip-sectors and repeating-circles had left them no scope for picturesque sublimity. This may excuse a literal transcript from my diary, which runs perhaps into the other extreme.

“*Friday*, 11 P.M. A strip of horizon, commencing about 8° to the east of the sun, and between it and

the land, resembled an extended plain, covered with the debris of ruined cities. No effort of imagination was necessary for me to travel from the true watery horizon to the false one of refraction above it, and there to see huge structures lining an aerial ocean-margin. Some of rusty, Egyptian, rubbish-clogged propyla, and hypæthral courts—some tapering and columnar, like Palmyra and Baalbec—some with architrave and portico, like Telmessus or Athens, or else vague and grotto-like, such as dreamy memories recalled of Ellora and Carli.

“I can hardly realize it as I write; but it was no trick of fancy. The things were there half an hour ago. I saw them, capricious, versatile, full of forms, but bright and definite as the phases of sober life. And as my eyes ran round upon the marvelous and varying scene, every one of these well-remembered cities rose before me, built up by some suggestive feature of the ice.

“An iceberg is one of God’s own buildings, preaching its lessons of humility to the miniature structures of man. Its material, one colossal Pentelicus; its mass, the representative of power in repose; its distribution, simulating every architectural type. It makes one smile at those classical remnants which our own period reproduces in its Madeleines, Walhallas, and Girard colleges, like university poems in the dead languages. Still, we can compare them with the iceberg; for the same standard measures both, as it does Chimborazo and the Hill of Howth. But this thing of refraction is supernatural throughout. The wildest frolic of an opium-eater’s reverie is nothing to the phantasmagoria of the sky to-night. Karnaks of ice, turned upside down, were resting upon rainbow-colored ped-

estals: great needles, obelisks of pure whiteness, shot up above their false horizons, and, after an hour-glass-like contraction at their point of union with their duplicated images, lost themselves in the blue of the upper sky.

“While I was looking—the sextant useless in my hand, for I could not think of angles—a blurred and wavy change came over the fantastic picture. Prismatic tintings, too vague to admit of dioptric analysis, began to margin my architectural marbles, and the scene faded like one of Fresnel’s dissolving views. Suddenly, by a flash, they reappeared in full beauty; and, just as I was beginning to note in my memorandum-book the changes which this brief interval had produced, they went out entirely, and left a nearly clear horizon.”

The 6th of July found us in latitude $72^{\circ} 54'$, beating to windward, as usual, between “the pack” and the land. This land was of some interest to us, for we were now in the neighborhood of the Danish settlement of Upernavik.

With the exception of one subordinate station, eighteen miles further to the north, this is the last of the Danish settlements. It is the jumping-off place of Arctic navigators—our last point of communication with the outside world. Here the British explorers put the date to their official reports, and send home their last letters of good-by. We sent ours without the delay of seeking the little port; for a couple of kayacks boarded us twenty miles out to sea, and for a few biscuits gladly took charge of our dispatches. The honesty of these poor Esquimaux is proverbial. Letters committed to their care are delivered with unerring safety to the superintendent of the port or station.

We were boarded, too, by an oomiak, or woman's boat, returning from a successful seal hunt. From the crew, consisting of three women and four men, we purchased a goodly stock of eider eggs and three young seals.

July 7. We had now passed the seventy-third degree of latitude without being materially retarded by ice. The weather was one unbroken sunshine, and worthier of the Bay of Naples than Baffin's. The coast on our right hand consisted of low islands, so grouped as to resemble continuous land. To our left was a coast of a different character—the ice.

On the morning of the 7th, a large vacant sheet of water showed itself to the westward, penetrating the ice as far as the eye could reach; and from the topmast-head we could see the southern margin of this ice losing itself in a clear, watery horizon. It was a strong temptation. Our commander determined to try for a passage through.

“We now entered fairly the so-thought open water, keeping the shore on our starboard beam, and steering for the northeast and north, at a rate of six knots, through an apparently unobstructed sea. But the sanguine anticipations of our commander were soon to be moderated. By four in the afternoon, after placing at least fifty miles between us and the coast, the leads began to close around us. Fearing a separation from the Rescue, we took her in tow and continued our efforts; but from 5 P. M. until the termination of the day, our progress was absolutely nothing. The morning of the 8th opened upon us fast in summer ice.

“*July 9.* Although we commenced bright and early to warp our way through the impacted ice, we found,

"TRACKING.

KAYAKER.

ONMIAK, OR WOMAN'S BOAT.

after much labor, that the entire day's reward was about three miles. We are now again fast, completely 'beset,' and only waiting to rest the crew before we renew our efforts."

What these efforts were it may be as well to explain, for the benefit of fireside navigators, and perhaps some others. Those who go down to the sea in ships know that it is easy enough to drive along in a clear sea on a free wind, or to haul into dock, or to warp up a quiet river, butting aside the lazy vessels as they swing at anchor. How do we sail, and haul, and warp in these Arctic Seas!

Let us begin by imagining a vessel, or, for variety, two of them, speeding along at eight knots an hour, and heading directly for a long, low margin of ice about two miles off. "D'ye see any opening?" cries the captain, hailing an officer on the foretopsail-yard. "Something like 'a lead' a little to leeward of that iceberg on our port-bow." In a little while we near the ice; our light sails are got in, our commander taking the place of the officer, who has resumed his station on the deck.

Before you, in a plain of solid ice, is a huge iceberg, and near it a black, zigzag canal, checkered with recent fragments.

Now commences the process of "conning." Such work with the helm is not often seen in ordinary seas. The brig's head is pointed for the open gap; the watch are stationed at the braces; a sort of silence prevails. Presently comes down the stentorian voice of our commander, "Hard-a-starboard," and at the same moment the yards yield to the ready haul at the braces. The brig turns her nose into a sudden indentation, and bangs her quarter against a big lump of "swashing"

ice. "Steady there!" For half a minute not a sound, until a second yell—"Down, down! hard down!" and then we rub, and scrape, and jam, and thrust aside, and are thrust aside; but somehow or other find ourselves in an open canal, losing itself in the distance. This is "a lead."

As we move on, congratulating ourselves—if we think about the thing at all—that we are "good" for a few hundred yards more, a sudden exclamation, addressed to nobody, but sufficiently distinctive, comes from the yard-arm (we'll call it "pshaw!"), and, looking ahead, we see that our "lead" is getting narrower, its sides edging toward each other—it is losing its straightness. At the same moment comes a complicated succession of orders: "Helm-a-starboard!" "Port!" "Easy!" "So!" "Steadie-ee-ee!" "Hard-a-port!" "Hard, hard, hard!" (scrape, scratch, thump!) "Eugh!" an anomalous grunt, and we are jammed fast between two great ice-fields of unknown extent. The captain comes down, and we all go quietly to supper.

Next come some processes unconnected with the sails, our wings. These will explain, after Arctic fashion, the terms "heave," and "warp," and "track," and "haul," for we are now beset in ice, and what little wind we have is dead ahead. A couple of hands, under orders, of course, seize an iron hook or "ice-anchor," of which we have two sizes, one of forty, and another of about a hundred pounds. With this they jump from the bows, and "plant it" in the ice ahead, close to the edge of the crack, along which we wish to force our way. Once fast, you slip a hawser around its smaller end, and secure it from slips by a "mousing" of rope-yarn. The slack of the hawser is passed

around the shaft of our patent winch—an apparatus of cogs and levers standing in our bows—and every thing, in far less time than it has taken me to describe it, is ready for “heaving.”

Then comes the hard work. The hawser is hauled *taut*; the strain is increased; every body, captain, cook, steward, and doctor, is taking a *spell* at the “pump handles” or overhauling the warping gear; for dignity does not take care of its hands in the middle pack; until at last, if the floes be not too obdurate, they separate by the wedge action of our bows, and we force our way into a little cleft, which is kept open on either side by the vessel’s beam. But the quiescence, the equilibrium of the ice, which allows it to be thus severed at its line of junction, is rare enough. Oftentimes we heave, and haul, and sweat, and, after parting a ten-inch hawser, go to bed wet, and tired, and discontented, with nothing but experience to pay for our toil. This is “warping.”

But let us suppose that, after many hours of this sort of unprofitable labor, the floes release their pressure, or the ice becomes frail and light. “Get ready the lines!” Out jumps an unfortunate with a forty-pound “hook” upon his shoulder, and, after one or two duckings, tumbles over the ice and plants his anchor on a distant cape, in line with our wished-for direction. The poor fellow has done more than carry his anchor; for a long white cord has been securely fastened to it, which they “pay out” from aboard ship as occasion requires. It passes inboard through a block, and then, with a few artistic turns, around the capstan. Its “slack” or loose end is carried to a little windlass at our main-mast. Now comes the warping again. The first or heavy warping we called “heaving:” this last

is a civilized performance; "all hands" walking round with the capstan-bars to the click of its iron pauls, or else, if the watch be fresh, to a jolly chorus of sailors' songs.

We have made a few hundred yards of this light warping, when the floes, never at rest, open into a tortuous canal again. We can dispense with the slow traction of the capstan. The same whale-line is passed out ahead, and a party of human horses take us in tow. Each man—or horse, if you please—has a canvas strap passing over his shoulder and fastened to the tow-line; or, nautically, as this is a chapter explanatory of terms, "toggled to the warp." This harnessing is no slight comfort to hands wet with water at the freezing point; and with its aid they tug along, sometimes at a weary walk, and sometimes at a dog-trot. This is "tracking."

When we could neither "heave," nor "warp," nor "track," nor sail, we resorted to all sorts of useless expedients, such as sawing, cutting, and vainly striving to force our way into a more hopeful neighborhood. It was long before experience taught us to spare ourselves this useless labor.

We had been three weeks completely imprisoned, and the season for useful search was rapidly flitting by, when, on the 27th of July, came the dawning promise of escape.

A steady breeze had been blowing for several days from the northward and westward, and under its influence the ice had so relaxed, that, had not the wind been dead ahead, we should have attempted sails. Our floe surface, disturbed by these new influences gave us a constantly-shifting topography. It was curious to see the rapidity of the transformations. At

one moment we were closed in by ice three feet thick, with a worn-down berg fifty feet deep on our beam; our bows buried in hummocky masses, and our stern-post clogged with frozen sludge: in ten minutes open lanes were radiating from us in every direction, cracks becoming rivers, and puddles lakes: warping ahead for five minutes, every thing around us was ice again.

But changes were going on. The sky had become lowering, the gulls had left us, and the barometer had fallen eight tenths since the day before.

Late on the afternoon of the 28th, after another long day of unprofitable warping, the wind shifted to the eastward. The floes opened still wider, something like water was visible to the north and east, and at 9h. 30m. P.M. we "cast off," set our main-sail, and, with feelings of joyous relief, began to bore the ice. This wind soon freshened to a southeaster, and we dashed along to the northeast in a sea studded with icebergs. Broken floes running out into "streams" were on all sides of us; but, only too glad to be once more free, we bored through them for the inshore circuit of Melville Bay.

After a little while the horizon thickened; and although our wind, surrounded as we were by ice, could hardly be called a gale, heavy undulations began to set in, making an uncomfortable sea, rendered dangerous indeed by the swashing ice and a growing fog.

The ice, too, after a little while, was no longer the rotten, half-thawed material of the middle pack, but heavy floes eight or ten feet of solid thickness, which seemed to stand out from the shore.

Presently we found ourselves, urged by wind and sea, on a lee ridge of undulating fragments. There was no help for it: with grinding crash we entered its

tumultuous margin. Before we had bored into it more than ten yards, we were on the edge of a nearly submerged iceberg, which, not being large enough to resist the swell, rolled fearfully. The sea dashed in an angry surf over its inclined sides, rattling the icy fragments or "brash" against its irregular surface. Our position reminded me of the scenes so well described by Beechy in the voyage of the *Dorothea* and *Trent*. For a time we were awkwardly placed, but we bored through; and the *Rescue*, after skirting the same obstruction, managed also to get through without damage.

We continued to run along with our top-sail yard on the cap, but the growing fog made it impossible to keep on our course very long. After several encounters with the floating hummocks, we succeeded in tying fast to a heavy floe, which seemed to be connected with the land, and were thus moored within that mysterious circuit known as Melville Bay.

It is during the transit of this bay that most of the catastrophes occur which have made the statistics of the whalers so fearful. It was here, about twenty miles to the south of us, that in one year more than one thousand human beings were cast shelterless upon the ice, their ships ground up before their eyes. It is rarely that a season goes by in which the passage is attempted without disaster.

The inshore side of the indentation is lined by a sweep of glacier, through which here and there the dark headlands of the coast force themselves with severe contrast. Outside of this, the shore, if we can call it such, is again lined with a heavy ledge of ground ice, thicker and more permanent than that in motion. This extends out for miles, forming an icy margin or beach, known technically as the "land ice,"

or "the fast." Against this margin, the great "drift" through which we had been passing exerts a remitting action, receding sometimes under the influence of wind and currents so as to open a tortuous and uncertain canal along its edge, at others closing against it in a barrier of contending floes and bergs.

Our initiation into the mysteries of this region was ominous enough. It blew a gale. The offing was a scene of noisy contention, obscured by a dense fog, through which rose the tops of the icebergs as they drifted by us. Twice in the night we were called up to escape these bergs by warping out of their path. Imagine a mass as large as the Parthenon bearing down upon you before a storm-wind!

The immediate site of our anchorage was about eighteen miles from the Black Hills, which rose above the glacier. It was truly an iron-bound coast, bergs, floes, and hummock ridges, in all the disarray of wintery conflict, cemented in a basis of ice ten feet thick, and lashed by an angry sea. It was the first time I had witnessed the stupendous results of ice action. I went out with Captain De Haven to observe them more closely. The hummocks had piled themselves at the edges of the floes in a set of rugged walls, sometimes twenty feet high; and here and there were icebergs firmly incorporated in the vast plain. Our attention was of course directed more anxiously to those which were drifting at large upon the open water; but we could not help being impressed by the solid majesty of these stationary mountains. The height of one of them, measured by the sextant, was two hundred and forty feet.

It was the motion of the floating bergs that surrounded us at this time, which first gave me the idea

of a great under-current to the northward. Their drift followed some system of advance entirely independent of the wind, and not apparently at variance with the received views of a great southern current. On the night of the 30th, while the surface ice or floe was drifting to the southward with the wind, the bergs were making a northern progress, crushing through the floes in the very eye of the breeze at a measured rate of a mile and a half an hour. The disproportion that uniformly subsists between the submerged and upper masses of a floating berg makes it a good index of the deep sea current, especially when its movement is against the wind. I noticed very many ice-mountains traveling to the north in opposition to both wind and surface ice. One of them we recognized five days afterward, nearly a hundred miles on its northern journey.

In the so-called night, "all hands" were turned to, and the old system of warping was renewed. The unyielding ice made it a slow process, but enough was gained to give us an entrance to some clear water about a mile in apparent length. While we were warping, one of these current-driven bergs kept us constant company, and at one time it was a regular race between us, for the narrow passage we were striving to reach would have been completely barricaded if our icy opponent had got ahead.

This exciting race, against wind and drift, and with the Rescue in tow, was at its height when we reached a point where, by warping around our opponent, we might be able to make sail. Three active men were instantly dispatched to prepare the warps. One took charge of the hawser, and another of the iron crow or chisel which is used to cut the hole; the third, a

brawny seaman, named Costa, was in the act of lifting the anchor and driving it by main force into the solid ice, when, with a roar like near thunder, a crack ran across the berg, and almost instantly a segment about twice the size of our ship was severed from the rest. One man remained oscillating on the principal mass, a second escaped by jumping to the back ropes and chain shrouds of the bowsprit; but poor Costa! anchor and all, disappeared in the chasm! By a merciful Godsend, the sunken fragment had broken off so cleanly that, when it rose, it scraped against the fractured surface, and brought up its living freight along with it. Scared half to death, he was caught by the captain as he passed the jib-boom, and brought safe on board. This incident, coming thus early in our cruise, was a useful warning.

"*August 2.* 'Warping!' Tired of the very word! About 2 P.M. a lead, less obstructed than its fellows, enabled us to crowd on the canvas, and sail with gentle airs for about two miles to the eastward, and then, losing what little wind we had, we tied up again to our friend the land ice; the little Rescue, as usual, a few yards astern.

"We have learned to love the sunshine, though we have lost the night that gives it value to others. It comes back to us this evening, after the gale, with a circuit of sparkling and imaginative beauty, like the spangled petticoat of a ballet-dancer in full twirl to a boy on his first visit to the opera. I borrow the comparison from one of my mess-mates; but, in truth, all this about sunshine and warmth is only comparative at the best, for, though writing on deck, 'out of doors,' as they say at home, the thermometers give us but 43°."

The bergs were an interesting subject of study. I counted one morning no less than two hundred and ten of them from our decks, forming a beaded line from the N.N.W. to the S.S.E.

"*August 10.* Another day of sunshine. Were we in the Mediterranean, there could not be a warmer sky. It ends with the sky though; for our thermometers fell at four A.M. to 24°. A careful set of observations with Green's standard thermometers gave 18° as the difference between the sunshine and shade at noonday. The young ice was nearly an inch thick. Myriads of Auks were seen, and the usual supply duly slaughtered.

"Melville's Monument appeared to-day under a new phase, rising out from the surrounding floe ice, either a salient peninsula or an isolated rock.

"The land ice measured but five feet seven inches, the reduced growth, probably, of a single season. The open leads multiply, for we made under sail about fifteen miles N.N.W."

As the next day glided in, the skies became overcast, and the wind rose. Mist gathered about the horizon, shutting out the icebergs. The floes, which had opened before with a slender wind from the northward, now shed off dusty wreaths of snow, and began to close rapidly.

Moving along in our little river passage, we observed it growing almost too narrow for navigation, and every now and then, where a projecting cape stretched out toward this advancing ice, we had to run the gauntlet between the opposing margins.

It is under these circumstances, with a gale probably outside, and a fog gathering around, that the whalers, less strengthened than ourselves, and taught

by a fearful experience, seek protecting bights among the floes or cut harbors in the ice. For us, the word delay did not enter into our commander's thoughts. We had not purchased caution by disaster; and it was essential to success that we should make the most of this Godsend, a "slant" from the southeast.

We pushed on; but the Rescue, less fortunate than ourselves, could not follow. She was jammed in between two closing surfaces. We were looking out for a temporary niche in which to secure ourselves, when we were challenged to the bear hunt I have spoken of a few pages back.

Upon regaining the deck with Mr. Lovell's prize, we were struck with the indications of a brooding wind outside. The ice was closing in every direction; and our master, Mr. Murdaugh, had no alternative but to tie up and await events. The Rescue did the same, some three hundred yards to the southward.

By five A.M., a projecting edge of the outside floe came into contact with our own, at a point midway between the two vessels. This assailing floe was three feet eight inches thick, perhaps a mile in diameter, and moving at a rate of a knot an hour. Its weight was some two or three millions of tons. So irresistible was its momentum, that, as it impinged against the solid margin of the land ice, there was no recoil, no interruption to its progress. The elastic material corrugated before the enormous pressure; then cracked, then crumbled, and at last rose, the lesser over the greater, sliding up in great inclined planes: and these, again, breaking by their weight and their continued impulse, toppled over in long lines of fragmentary ice.

This imposing process of dynamics is called "Hummocking." Its most striking feature was its

unswerving, unchecked continuousness. The mere commotion was hardly proportioned either to the intensity of the force or the tremendous effects which it produced. Tables of white marble were thrust into the air, as if by invisible machinery.

First, an inclined face would rise, say ten feet; then you would hear a grinding, tooth-pulling *crunch*: it has cracked at its base, and a second is sliding up upon it. Over this, again, comes a third; and hereupon the first breaks down, carrying with it the second; and just as you are expecting to see the whole pile disappear, up comes a fourth, larger than any of the rest, and converts all its predecessors into a chaotic mass of crushed marble. Now the fragments thus comminuted are about the size of an old-fashioned Conestoga wagon, and the line thus eating its way is several hundred yards long.

The action soon began to near our brig, which now, fast by a heavy cable, stood bows on awaiting the onset. It was an uncomfortable time for us, as we momentarily expected it to "nip" her sides, or bear her down with the pressure. But, thanks to the inverted wedge action of her bows, she shot out like a squeezed water-melon seed, snapping her hawser like pack-thread, and backing into wider quarters. The Rescue was borne almost to her beam ends, but eventually rose upon the ice.

We cast off again about 7 A.M.; and after a wearisome day of warping, tracking, towing, and sailing, advanced some six or eight miles, along a coast-line of hills to the northeast, edged with glaciers.

The currents were such as to entirely destroy our steerage way. Our rudder was for a time useless; and the surface water was covered by ripple marks



THE DEVIL'S THUMB.

MELVILLE BAY.

which flowed in strangely looping curves. On the 13th the sea abounded with life. Cetochili, as well as other entomostracan forms which I had not seen before, lined, and, in fact, tinted the margins of the floe ice; and for the first time I noticed among them some of those higher orders of crustacean life, which had heretofore been only found adhering to our warping lines. Among these were asellus and idotea, and that jerking little amphipod, the gammarus. Acalephæ and limacinæ abounded in the quiet leads. The birds, too, were back with us, the mollemoke, the Ivory gull, the Burgomaster, and the tern.

The shore, which we had been so long skirting, again rose into mountains; on whose southern flanks, as they receded, we could still see the great glacier. We had traced it all the way from the Devil's Thumb in a nearly continuous circuit; now we were about to lose it. The icebergs had sensibly diminished already.

"6 P.M. Refraction again! There is a black globe floating in the air, about 3° north of the sun. What it is you can not tell. Is it a bird or a balloon? Presently comes a sort of shimmering about its circumference, and on a sudden it changes its shape. Now you see plainly what it is. It is a grand piano, and nothing else. Too quick this time! You had hardly named it, before it was an anvil—an anvil large enough for Mulciber and his Cyclops to beat out the loadstone of the poles. You have not got it quite adjusted to your satisfaction, before your anvil itself is changing; it contracts itself centrewise, and rounds itself endwise, and, *presto*, it has made itself duplicate—a pair of colossal dumb-bells. A moment! and it is the black globe again."

About an hour after this necromantic juggle, the whole horizon became distorted: great bergs lifted themselves above it, and a pearly sky and pearly water blended with each other in such a way, that you could not determine where the one began or the other ended. Your ship was in the concave of a vast sphere; ice shapes of indescribable variety around you, floating, like yourself, on nothingness; the flight of a bird as apparent in the deeps of the sea as in the continuous element above. Nothing could be more curiously beautiful than our consort the Rescue, as she lay in mid-space, duplicated by her secondary image.

This unequally refractive condition continued on into the next day; diminishing as the sun approached his meridian altitude, but again coming back in the afternoon with augmented intensity. The appearance at night was more wonderful than it had been on the 12th. I am desirous to give the impressions it made on me at the moment, and I therefore copy again from my journal, without erasing or modifying a single line.

"*August 13.* To-night, at ten o'clock, we were opposite a striking cliff, supposed to be Cape Melville, when, attracted by the irregular radiation from the sun, then about two hours from the lowest point of his curve, I saw suddenly flaring up all around him the signs of active combustion. Great volumes of black smoke rose above the horizon, narrowing and expanding as it rolled away. Black specks, to which the eye, by its compensation for distance, gave the size of masses, mingled with it, rising and falling, appearing and disappearing; and above all this was the peculiar waving movement of air, rarefied by an adjacent

heat. The whole intervening atmosphere was disturbed and flickering.

“*August* 15. The Rescue, which has proved herself a dull sailer, had lagged astern of us, when our master, Mr. Murdaugh, observed the signal of ‘men ashore’ flying from her peak. We were now as far north as latitude $75^{\circ} 58'$, and the idea of human life somehow or other involuntarily connected itself with disaster. A boat was hastily stocked with provisions and dispatched for the shore. Two men were there upon the land ice, gesticulating in grotesque and not very decent pantomime—genuine, unmitigated Esquimaux. Verging on 76° is a far northern limit for human life; yet these poor animals were as fat as the bears which we killed a few days ago. Their hair, mane-like, flowed over their oily cheeks, and their countenances had the true prognathous character seen so rarely among the adulterated breeds of the Danish settlements. They were jolly, laughing fellows, full of social feeling. Their dress consisted of a bear-skin pair of breeches, considerably the worse for wear; a seal-skin jacket, hooded, but not pointed at its skirt; and a pair of coarsely-stitched seal-hide boots. They were armed with a lance, harpoon, and air-bladder, for spearing seals upon the land floe. The kaiack, with its host of resources, they seemed unacquainted with.

“When questioned by Mr. Murdaugh, to whom I owe these details, they indicated five huts, or families, or individuals, toward a sort of valley between two hills. They were ignorant of the use of bread, and rejected salt beef; but they appeared familiar with ships, and would have gladly invited themselves to visit us, if the officer had not inhospitably declined the honor.”

It was not very far from Cape York that we met these men. They belonged, probably, to the same detached parties of seal and fish catching coast nomads, that were met by Sir John Ross in his voyage of 1819, and whom he designated, fancifully enough, as the "Arctic Highlanders."

Eleven years after his visit, some boat-crews, from a whaler which had escaped the ice disasters of 1830, landed at nearly the same spot, and made for a group of huts. They were struck as they approached them to find no beaten snow-tracks about the entrance, nor any of the more unsavory indications of an Esquimaux homestead. The riddle was read when they lifted up the skin curtain, that served to cover at once doorway and window. Grouped around an oilless lamp, in the attitudes of life, were four or five human corpses, with darkened lip and sunken eyeball; but all else preserved in perennial ice. The frozen dog lay beside his frozen master, and the child, stark and stiff, in the reindeer hood which enveloped the frozen mother. The cause was a mystery, for the hunting apparatus was near them, and the bay abounds with seals, the habitual food, and light, and fire of the Esquimaux. Perhaps the excessive cold had shut off their supplies for a time by closing the ice-holes—perhaps an epidemic had stricken them. Some three or four huts that were near had the same melancholy furniture of extinct life.

CHAPTER XXXI.

THE FIRST AMERICAN EXPEDITION.

(CONTINUED.)

WE sailed along the coast quietly, but with the comfortable excitement of expectation. We had not yet seen such open water, and were momentarily expecting the change, of course, which was to lead us through the North Water to Lancaster Sound. The glaciers were no longer near the water-line; but an escarped shore, of the usual primary structure, gave us a pleasing substitute.

In a short time we reached the "Crimson Cliffs of Beverley," the seat of the often-described "red snow." The coast was high and rugged, the sea-line broken by precipitous sections and choked by detritus. Sailing slowly along, at a distance of about ten miles, we could distinctly see outcropping faces of red feldspathic rock, while in depending positions, between the cones of detritus, the scanty patches of snow were tinged with a brick-dust or brown stain. As yet indeed we could not see the "Crimson" of Sir John Ross, who gave to this spot its somewhat euphonious title; but the locality was not without indications which should excuse this gallant navigator from imputations against his veracity of narrative.

But it fell calm, and I had an opportunity of visiting the shore. The place where we landed was in

latitude $76^{\circ} 04'$ N., nearly. It was a little cove, bordered on one side by a glacier; on the other, watered by distillations from it, and green with luxuriant mosses. It was, indeed, a fairy little spot, brightened, perhaps, by its contrast with the icy element, on which I had been floating for a month and a half before; yet even now, as it comes back to me in beautiful companionship with many sweet places of the earth, I am sure that its charms were real.

The glacier came down by a twisted circuit from a deep valley, which it nearly filled. As it approached the sea, it seemed unable to spread itself over the horse-shoe-like expansion in which we stood; but, retaining still the impress marks of its own little valley birth-place, it rose up in a huge dome-like escarpment, one side frozen to the cliffs, the other a wall beside us, and the end a rounded mass protruding into the sea.

Close by the foot of its precipitous face, in a furrowed water-course, was a mountain torrent, which, emerging from the point at which the glacier met the hill, came dashing wildly over the rocks, green with the mosses and carices of Arctic vegetation; while from the dome-like summit a stream, that had tunneled its way through the ice from the valley still higher above, burst out like a fountain, and fell in a cascade of foam-whitened water into the sea.

To return to the "Crimson Cliffs." We found the red snow in greatest abundance upon a talus fronting to the southwest, which stretched obliquely across the glacier at the seat of its emergence from the valley. It was here in great abundance, staining the surface in patches six or eight yards in diameter. Similar patches were to be seen at short intervals extending up the valley.

Its color was a deep but not bright red. It resembled, with its accompanying impurities, crushed preserved cranberries, with the seed and capsule strewn over the snow. It imparted to paper drawn over it a nearly cherry-red, or perhaps crimson stain, which became brown with exposure; and a handful thawed in a glass tumbler resembled muddy claret.

Its coloring matter was evidently soluble; for, on scraping away the surface, we found that it had dyed the snow beneath with a pure and beautiful rose color, which penetrated, with a gradually softening tint, some eight inches below the surface.

At 4 P.M. we left this interesting spot, for which some pleasant associations had suggested to me the name of "Bessie's Cove," and commenced beating to the northward. The sea was crowded with entomostraca and clios, on which myriads of Auks were feeding. The prospects of open water were most cheering. One mile from the shore, we got soundings in rocky bottom, at twenty-three fathoms, and then, wishing to "fill up" with water before attempting our passage to the west, we stood close in, seeking a favorable spot.

About eleven o'clock we were attracted by a bright midway between Capes York and Dudley Diggs. Its foreground was of rugged syenitic rocks, and over these we could distinctly see the water rushing down in a foaming torrent. Here was a watering-place.

By means of our old friends the warps, we hauled in so close that the sides of our vessels touched the rocks. A few inches only intervened between our keel and the shining pebbles. We could jump on shore as from a wharf. The sun was so low at this midnight hour as to bathe every thing in an atmosphere of Italian pink, deliciously unlike the Arctic regions. The recess

was in blackest shadow, but the cliffs which formed the walls of the cove rose up into full sunshine. The Auks crowded these rocks in myriads. So, with gun and sextant, I started on a tramp.

The cove itself measured but six hundred yards from bluff to bluff. It was recessed in a regular ellipse, or rather horseshoe, around which the strongly-featured gneisses, relieved, as usual, with the outcroppings of feldspar, formed lofty mural precipices. I estimated their mean elevation at twelve hundred feet. At their bases a mass of schistose rubbish had accumulated.

I have described this recess as a perfect horseshoe: it was not exactly such, for at its northeast end a rugged little water-feeder, formed by the melting snows, sent down a stream of foam which buried itself under the frozen surface of a lake. Yet to the eye it was a nearly absolute theatre, this little cove, and its arena a moss-covered succession of terraces, each of indescribable richness.

Strange as it seemed, on the immediate level of snow and ice, the constant infiltrations, aided by solar reverberation, had made an Arctic garden-spot. The surface of the moss, owing, probably, to the extreme alternations of heat and cold, was divided into regular hexagons and other polyhedral figures, and scattered over these, nestling between the tufts, and forming little groups on their southern faces, was a quiet, unobtrusive community of Alpine flowering plants. The weakness of individual growth allowed no ambitious species to overpower its neighbor, so that many families were crowded together in a rich flower-bed. In a little space that I could cover with my pea-jacket, the veined leaves of the *Pyrola* were peeping out among chickweeds and saxifrages, the sorrel and *Ranunculus*. I even found a

LOOKING FOR WATER.

REBBIE'S COVE.

poor gentian, stunted and reduced, but still, like every thing around it, in all the perfection of miniature proportions.

As this mossy parterre approached the rocky walls that hemmed it in, tussocks of sedges and coarse grass began to show themselves, mixed with heaths and birches; and still further on, at the margin of the horse-shoe, and fringing its union with the stupendous piles of debris, came an annulus of Arctic shrubs and trees.

Shrubs and trees! the words recall a smile, for they only typed those natives of another zone. The poor things had lost their uprightness, and learned to escape the elements by trailing along the rocks. Few rose above my shoes, and none above my ankles; yet shady alleys and heaven-pointing avenues could not be more impressive examples of creative adaptation. Here I saw the bleaberry (*Vaccinium uliginosum*) in flower and in fruit—I could cover it with a wine-glass; the wild honeysuckle (*Azalea procumbens*) of our Pennsylvania woods—I could stick the entire plant in my button-hole; the *Andromeda tetragona*, like a green marabou feather.

Strangest among these transformations came the willows. One, the *Salix herbacea*, hardly larger than a trefoil clover; another, the *S. glauca*, like a young althea, just bursting from its seed. A third, the *S. lanata*, a triton among these boreal minnows, looked like an unfortunate garter-snake, bound here and there by claw-like radicles, which, unable to penetrate the inhospitable soil, had spread themselves out upon the surface—traps for the broken lichens and fostering moss which formed its scanty mould.

I had several opportunities, while taking sextant elevations of the headlands, to measure the moss-beds

of this cove, both by sections where streams from the lake had left denuded faces, and by piercing through them with a pointed staff. These mosses formed an investing mould, built up layer upon layer, until it had attained a mean depth of five feet. At one place, near the sea line, it was seven feet; and even here the slow processes of Arctic decomposition had not entirely destroyed the delicate radicles and stems. The fronds, of the pioneering lichens were still recognizable, entangled among the rest.

Yet these little layers represented, in their diminutive stratification, the deposits of vegetable periods. I counted sixty-eight in the greatest section.* Those chemical processes by which nature converts our autumnal leaves into pabulum for future growths work slowly here.

My companions were already firing away at the Auks, which covered in great numbers the debris of fallen rock. This was deposited at an excessive inclination, sometimes as great as 47° ; its talus, some three hundred feet in height, cutting in cone-like processes against the mural faces of the cliff.

There was something about this great inclined plane, with its enormous fragments, their wild distribution, and steep angle of deposit, almost fearfully characteristic of the destructive agencies of Arctic congelation. I had never seen, not even at the bases of the mural traps of India and South America—or better, perhaps, than either, our own Connecticut—such evidences of active degradation. It is not to the geologist alone

* I copy the number of these layers as I find it marked in my journal; yet I do so, not without some fear that I may be misled by the chirography of a very hurried note. My recollections are of a very large number, yet not so large as that which my respect for the *littera scripta* induces me to retain in the text.

that these talus and debris are impressive. They tell of changes which have begun and been going on since the existence of the earth in its present state by the friction of time against its surface; and they carry us on with solemn force to the period when the dehiscent edges and mountain ravines of this same earth shall have been worn down into rounded hill and gentle valley. Well may they be called "geological chronometers."* They point with impressive finger to the rotation of years. The dial-plate and the index are both there, and human wisdom almost deciphers the notation!

On the steeper flanks of these rocky cones the little Auks had built their nests. The season of incubation, though far advanced, had not gone by, for the young fledglings were looking down upon me in thousands; and the mothers, with crops full of provender, were constantly arriving from the sea. Urged by a wish to study the domestic habits of these little Arctic emigrants at their homestead, I foolishly clambered up to one of their most popular colonies, without thinking of my descent.

The angle of deposit was already very great, not much less than 50° ; and as I moved on, with a walking-pole substituted for my gun, I was not surprised to find the fragments receding under my feet, and rolling, with a resounding crash, to the plain below. Stopping, however, to regain my breath, I found that above, beneath, around me, every thing was in motion. The entire surface seemed to be sliding down. Ridiculous as it may seem to dwell upon a matter apparently so trivial, my position became one of danger. The accelerated velocity of the masses caused them to leap off

* Mantell's "Wonders of Geology."

in deflected lines. Several uncomfortable fragments had already passed by me, some even over my head, and my walking-pole was jerked from my hands and buried in the ruins. Thus helpless, I commenced my own half-involuntary descent, expecting momentarily to follow my pole, when my eye caught a projecting outcrop of feldspar, against which the strong current split into two minor streams. This, with some hard jumps, I succeeded in reaching.

As I sat upon the temporary security of this little rock, surrounded by falling fragments, and awaiting their slow adjustment to a new equilibrium before I ventured to descend, I was struck with the Arctic originality of every thing around. It was midnight, and the sun, now to the north, was hidden by the rocks; but the whole atmosphere was pink with light. Over head and around me whirled innumerable crowds of Auks and Ivory gulls, screeching with execrable clamor, almost in contact with my person.

The calm which had given us these two days of shore rambles left us suddenly on the 18th. We stood towards Wolstenholme Sound, and bore across to the west in more open water than we had seen for several weeks. It was now beyond doubt that we were to winter somewhere among the scenes of Arctic trial. We were past the barrier, heading direct for Lancaster Sound, with the motion of waves once more under us, and a breeze aloft. As I refer to my journal, I see how the tone of feeling rose among our little party. We began again with something of confidence to connect the probable results with the objects of the expedition. We had lost three weeks off the Devil's Tongue, the British steamers were far ahead of us in point of time, and their superior ability and practice

would still keep them in the advance ; and we were ignorant of their course and intended scheme of search. We had dreamed before this, and pleasantly enough, of fellowship with them in our efforts, dividing between us the hazards of the way, and perhaps in the long winter holding with them the cheery intercourse of kindred sympathies. We waked now to the probabilities of passing the dark days alone. Yet fairly on the way, an energetic commander, a united ship's company, the wind freshening, our well-tried little ice-boat now groping her way like a blind man through fog and bergs, and now dashing on as if reckless of all but success—it was impossible to repress a sentiment almost akin to the so-called joyous excitement of conflict.

We were bidding good-by to “ye goode baye of old William Baffin ;” and as we looked round with a farewell remembrance upon the still water, the diminished icebergs, and the constant sun which had served us so long and faithfully, we felt that the bay had used us kindly.

Though I had read a good deal in the voyagers' books about Baffin's Bay, I had strangely and entirely misconceived the prominent features of its summer scenery. There is a combination of warmth and cold in the tone of its landscapes, a daring, eccentric variety of forms, an intense clearness, almost energy of expression, which might tax Turner and Stanfield together to reproduce them with an approach to truth. How could they trace the features of the iceberg, melting into shapes so boldly marked, yet so undefined ; or body forth its cold varieties of unshaded white, or the azure clare-obscure of the ice-chasm ! There are the black hills, blots upon rolling snow ; the ice-plain, mar-

gined with glaciers, and jutting out in capes from the cliffed shore: there is the still blue water. Or, if you want action instead of repose, here is the crashing floe, the grinding hummock, and the monumental berg rising above both! itself, though perishable, a seeming permanency compared with the ephemeral ruins that beat against its sides.

All this is attempered by the warm glazing of a tinted atmosphere. The sky of Baffin's Bay, though but eight hundred miles from the Polar limit of all northernness, is as warm as the Bay of Naples after a June rain. What artist, then, could give this mysterious union of warm atmosphere and cold landscape?

The perpetual daylight had continued up to this moment with unabated glare. The sun had reached his north meridian altitude some days before, but the eye was hardly aware of change. Midnight had a softened character, like the low summer's sun at home, but there was no twilight.

At first the novelty of this great unvarying day made it pleasing. It was curious to see the "midnight Arctic sun set into sunrise," and pleasant to find that, whether you ate or slept, or idled or toiled, the same daylight was always there. No irksome night forced upon you its system of compulsory alternations. I could dine at midnight, sup at breakfast-time, and go to bed at noonday; and but for an apparatus of coils and cogs, called a watch, would have been no wiser and no worse.

My feeling was at first an extravagant sense of undefined relief, of some vague restraint removed. I seemed to have thrown off the slavery of hours. In fact, I could hardly realize its entirety. The astral lamps, standing, dust-covered, on our lockers—I am

quoting the words of my journal—puzzled me, as things obsolete and fanciful.

My lot had been cast in the zone of liriodendrons and sugar-maples, in the nearly midway latitude of 40°. I had been habituated to day and night; and every portion of these two great divisions had for me its periods of peculiar association. Even in the tropics, I had mourned the lost twilight. How much more did I miss the soothing darkness, of which twilight should have been the precursor! I began to feel, with more of emotion than a man writing for others likes to confess to, how admirable, as a systematic law, is the alternation of day and night—words that type the two great conditions of living nature, action and repose. To those who with daily labor earn the daily bread, how kindly the season of sleep! To the drone who, urged by the waning daylight, hastens the deferred task, how fortunate that his procrastination has not a six months' morrow! To the brain-workers among men, the enthusiasts, who bear irksomely the dark screen which falls upon their day-dreams, how benignant the dear night blessing, which enforces reluctant rest!

“*August 19.* The wind continued freshening, the Aneroid falling two tenths in the night. About eight I was called by our master, with the news that a couple of vessels were following in our wake. We were shortening sail for our consort; and by half past twelve, the larger stranger, the *Lady Franklin*, came up along side of us. A cordial greeting, such as those only know who have been pelted for weeks in the solitudes of Arctic ice—and we learned that this was Captain Penny's squadron, bound on the same pursuit as ourselves. A hurried interchange of news followed.

The ice in Melville Bay had bothered both parties alike; Commodore Austin, with his steamer tenders, was three days ago at Carey's Islands, a group nearly as high as 77° north latitude; the North Star, the missing provision transport of last summer, was safe somewhere in Lancaster Sound, probably at Leopold Island. For the rest, God speed!

"As she slowly forged ahead, there came over the rough sea that good old English hurra, which we inherit on our side the water. 'Three cheers, hearty, with a will!' indicating as much of brotherhood as sympathy. 'Stand aloft, boys!' and we gave back the greeting. One cheer more of acknowledgment on each side, and the sister flags separated, each on its errand of mercy.

"The sea is short and excessive. Every thing on deck, even anchors and quarter-boats, have 'fetched away,' and the little cabin is half afloat. The Rescue is staggering under heavy sail astern of us. We are making six or seven knots an hour. Murdaugh is ahead, looking out for ice and rocks; De Haven conning the ship.

"All at once a high mountain shore rises before us, and a couple of isolated rocks show themselves, not more than a quarter of a mile ahead, white with breakers. Both vessels are laid to."

The storm reminded me of a Mexican "norther." It was not till the afternoon of the next day that we were able to resume our track, under a double-reefed top-sail, stay-sail, and spencer. We were, of course, without observation still, and could only reckon that we had passed the Cunningham Mountains and Cape Warrender.

About three o'clock in the morning of the 21st, an-

other sail was reported ahead, a top-sail schooner, towing after her what appeared to be a launch, decked over.

“When I reached the deck, we were nearly up to her, for we had shaken out our reefs, and were driving before the wind, shipping seas at every roll. The little schooner was under a single close-reefed top-sail, and seemed fluttering over the waves like a crippled bird. Presently an old fellow, with a cloak tossed over his night gear, appeared in the lee gangway, and saluted with a voice that rose above the winds.

“It was the *Felix*, commanded by that practical Arctic veteran, Sir John Ross. I shall never forget the heartiness with which the hailing officer sang out, in the midst of our dialogue, ‘You and I are ahead of them all.’ It was so indeed. Austin, with two vessels, was at Pond’s Bay; Penny was somewhere in the gale; and others of Austin’s squadron were exploring the north side of the Sound. The *Felix* and the *Advance* were on the lead.

“Before we separated, Sir John Ross came on deck, and stood at the side of his officer. He was a square-built man, apparently very little stricken in years, and well able to bear his part in the toils and hazards of life. He has been wounded in four several engagements—twice desperately—and is scarred from head to foot. He has conducted two Polar expeditions already, and performed in one of them the unparalleled feat of wintering four years in Arctic snows. And here he is again, in a flimsy cockle-shell, after contributing his purse and his influence, embarked himself in the crusade of search for a lost comrade. We met him off Admiralty Inlet, just about the spot at which he was picked up seventeen years before.”

Soon after midnight, the land became visible on the north side of the Sound. We had passed Cape Charles Yorke and Cape Crawford, and were fanning along sluggishly with all the sail we could crowd for Port Leopold.

It was the next day, however, before we came in sight of the island, and it was nearly spent when we found ourselves slowly approaching Whaler Point, the seat of the harbor. Our way had been remarkably clear of ice for some days, and we were vexed to find, therefore, that a firm and rugged barrier extended along the western shore of the inlet, and apparently across the entrance we were seeking.

It was a great relief to us to see, at half past six in the evening, a top-sail schooner working toward us through the ice. She boarded us at ten, and proved to be Lady Franklin's own search-vessel, the Prince Albert.

This was a very pleasant meeting. Captain Forsyth, who commanded the Albert, and Mr. Snow, who acted as a sort of adjutant under him, were very agreeable gentlemen. They spent some hours with us, which Mr. Snow has remembered kindly in the journal he has published since his return to England. Their little vessel was much less perfectly fitted than ours to encounter the perils of the ice; but in one respect at least their expedition resembled our own. They had to rough it: to use a Western phrase, they had no fancy fixings—nothing but what a hasty outfit and a limited purse could supply. They were now bound for Cape Rennell, after which they proposed making a sledge excursion over the lower Boothian and Cockburne lands.

The North Star, they told us, had been caught by

the ice last season in the neighborhood of our own first imprisonment, off the Devil's Thumb. After a perilous drift, she had succeeded in entering Wolstenholme Sound, whence, after a tedious winter, she had only recently arrived at Port Bowen.

They followed in our wake the next day as we pushed through many streams of ice across the strait. We sighted the shore about five miles to the west of Cape Hurd very closely; a miserable wilderness, rising in terraces of broken-down limestone, arranged between the hills like a vast theatre.

On the 25th, still beating through the ice off Radstock Bay, we discovered on Cape Riley two cairns, one of them, the most conspicuous, with a flag-staff and ball. A couple of hours after, we were near enough to land. The cape itself is a low projecting tongue of limestone, but at a short distance behind it the cliff rises to the height of some eight hundred feet. We found a tin canister within the larger cairn, containing the information that Captain Ommanney had been there two days before us, with the Assistance and Intrepid, belonging to Captain Austin's squadron, and had discovered traces of an encampment, and other indications "that some party belonging to her Britannic majesty's service had been detained at this spot." Similar traces, it was added, had been found also on Beechy Island, a projection on the channel side some ten miles from Cape Riley.

Our consort, the Rescue, as we afterward learned, had shared in this discovery, though the British commander's inscription in the cairn, as well as his official reports, might lead perhaps to a different conclusion. Captain Griffin, in fact, landed with Captain Ommanney, and the traces were registered while the two officers were in company.

I inspected these different traces very carefully, and noted what I observed at the moment. The appearances which connect them with the story of Sir John Franklin have been described by others; but there may still be interest in a description of them made while they were under my eye. I transcribe it word for word from my journal.

“On a tongue of fossiliferous limestone, fronting toward the west on a little indentation of the water, and shielded from the north by the precipitous cliffs, are five distinct remnants of habitation.

“Nearest the cliffs, four circular mounds or heapings-up of the crumbled limestone, aided by larger stones placed at the outer edge, as if to protect the leash of a tent. Two larger stones, with an interval of two feet, fronting the west, mark the places of entrance.

“Several large square stones, so arranged as to serve probably for a fire-place. These have been tumbled over by parties before us.

“More distant from the cliffs, yet in line with the four already described, is a larger inclosure; the door facing south, and looking toward the strait: this so-called door is simply an entrance made of large stones placed one above the other. The inclosure itself triangular; its northern side about eighteen inches high, built up of flat stones. Some bird bones and one rib of a seal were found exactly in the centre of this triangle, as if a party had sat round it eating; and the top of a preserved meat case, much rusted, was found in the same place. I picked up a piece of canvas or duck on the cliff side, well worn by the weather: the sailors recognized it at once as the gore of a pair of trowsers.

"A fifth circle is discernible nearer the cliffs, which may have belonged to the same party. It was less perfect than the others, and seemed of an older date.

"On the beach, some twenty or thirty yards from the triangular inclosure, were several pieces of pine wood about four inches long, painted green, and white, and black, and, in one instance, puttied; evidently parts of a boat, and apparently collected as kindling wood."

The indications were meagre, but the conclusion they led to was irresistible. They could not be the work of Esquimaux: the whole character of them contradicted it: and the only European who could have visited Cape Riley was Parry, twenty-eight years before; and we knew from his journal that he had not encamped here. Then, again, Ommanney's discovery of like vestiges on Beechy Island, just on the track of a party moving in either direction between it and the channel: all these speak of a land party from Franklin's squadron.

Our commander resolved to press onward along the eastern shore of Wellington Channel. We were under weigh in the early morning of the 26th, and working along with our consort toward Beechy—I drop the "Island," for it is more strictly a peninsula or a promontory of limestone, as high and abrupt as that at Cape Riley, connected with what we call the main by a low isthmus. Still further on we passed Cape Spencer; then a fine bluff point, called by Parry Point Innes; and further on again, the trend being to the east of north, we saw the low tongue, Cape Bowden. Parry merely sighted these points from a distance, so that the shore line has never been traced. I sketched it myself with some care; but the running survey

of this celebrated explorer had left nothing to alter. To the north of Cape Innes, though the coast retains the same geognostical character, the bluff promontories subside into low hills, between which the beach, composed of coarse silicious limestone, sweeps in long curvilinear terraces. Measuring some of these rudely afterward, I found that the elevation of the highest plateau did not exceed forty feet.

Our way northward was along an ice channel close under the eastern shore, and bounded on the other side by the ice-pack, at a distance varying from a quarter of a mile to a mile and three quarters. Off Cape Spencer the way seemed more open, widening perhaps to two miles, and showing something like continued free water to the north and west. Here we met Captain Penny, with the *Lady Franklin* and *Sophia*. He told us that the channel was completely shut in ahead by a compact ice barrier, which connected itself with that to the west, describing a horseshoe bend. He thought a southwester was coming on, and counseled us to prepare for the chances of an impactment. The go-ahead determination which characterized our commander made us test the correctness of his advice. We pushed on, tracked the horseshoe circuit of the ice without finding an outlet, and were glad to labor back again almost in the teeth of a gale.

Captain Penny had occupied the time more profitably. In company with Dr. Goodsir, an enthusiastic explorer and highly educated gentleman, whose brother was an assistant surgeon on board the missing vessels, he had been examining the shore. On the ridge of limestone, between Cape Spencer and Point Innes, they had come across additional proofs that Sir John's party had been here—very important these proofs as

extending the line along the shore over which the party must have moved from Cape Riley.

Among the articles they had found were tin canisters, with the London maker's label; scraps of newspaper, bearing the date 1844; a paper fragment, with the words "until called" on it, seemingly part of a watch order; and two other fragments, each with the name of one of Franklin's officers written on it in pencil.

On the 27th, the chances of this narrow and capricious navigation had gathered five of the searching vessels, under three different commands, within the same quarter of a mile—Sir John Ross', Penny's, and our own. Both Ross and Penny had made the effort to push through the sound to the west, but found a great belt of ice, reaching in an almost regular crescent from Leopold's Island across to the northern shore, about half a mile from the entrance of the channel. Captain Ommanney, with the *Intrepid* and *Assistance*, had been less fortunate. He had attempted to break his way through the barrier, but it had closed on him, and he was now fast, within fifteen miles of us, to the west.

After breakfast, our commander and myself took a boat to visit the traces discovered yesterday by Captain Penny. Taking the *Lady Franklin* in our way, we met Sir John Ross and Commander Phillips, and a conference naturally took place upon the best plans for concerted operations. I was very much struck with the gallant disinterestedness of spirit which was shown by all the officers in this discussion. Penny, an energetic, practical fellow, sketched out at once a plan of action for each vessel of the party. He himself would take the western search; Ross should run

over to Prince Regent's Sound, communicate the news to the Prince Albert, and so relieve that little vessel from the now unnecessary perils of her intended expedition; and we were to press through the first openings in the ice by Wellington Channel, to the north and east.

It was wisely determined by brave old Sir John that he would leave the Mary, his tender of twelve tons, at a little inlet near the point, to serve as a fall-back in case we should lose our vessels or become sealed up in permanent ice, and De Haven and Penny engaged their respective shares of her outfit, in the shape of some barrels of beef and flour. Sir John Ross, I think, had just left us to go on board his little craft, and I was still talking over our projects with Captain Penny, when a messenger was reported, making all speed to us over the ice.

The news he brought was thrilling. "Graves, Captain Penny! graves! Franklin's winter quarters!" We were instantly in motion. Captain De Haven, Captain Penny, Commander Phillips, and myself, joined by a party from the Rescue, hurried on over the ice, and, scrambling along the loose and rugged slope that extends from Beechy to the shore, came, after a weary walk, to the crest of the isthmus. Here, amid the sterile uniformity of snow and slate, were the head-boards of three graves, made after the old orthodox fashion of gravestones at home. The mounds which adjoined them were arranged with some pretensions to symmetry, coped and defended with limestone slabs. They occupied a line facing toward Cape Riley, which was distinctly visible across a little cove at the distance of some four hundred yards.

The first, or that most to the southward, is nearest to

the front in the accompanying sketch. Its inscription, cut in by a chisel, ran thus :

“ Sacred
to the
memory
of

W. BRAINE, R. M.,
H. M. S. Erebus.
Died April 3d, 1846,
aged 32 years.

‘ Choose ye this day whom ye will serve.’

Joshua, ch. xxiv., 15.”

• The second was :

“ Sacred to the memory of
JOHN HARTWELL, A. B. of H. M. S.
Erebus,
aged 23 years.

‘ Thus saith the Lord, consider your ways.’

Haggai, i., 7.”

The third and last of these memorials was not quite so well finished as the others. The mound was not of stone-work, but its general appearance was more grave-like, more like the sleeping-place of Christians in happier lands. It was inscribed :

“ Sacred
to
the memory
of

JOHN TORRINGTON,
who departed this life
January 1st, A.D. 1846,
on board of
H. M. ship Terror,
aged 20 years.”

“ Departed this life *on board* the Terror, 1st January, 1846 !” Franklin’s ships, then, had not been wrecked when he occupied the encampment at Beechy !

Two large stones were imbedded in the friable limestone a little to the left of these sad records, and near them was a piece of wood, more than a foot in diam-

eter, and two feet eight inches high, which had evidently served for an anvil-block: the marks were unmistakable. Near it again, but still more to the east, and therefore nearer the beach, was a large blackened space, covered with coal cinders, iron nails, spikes, hinges, rings, clearly the remains of the armorer's forge. Still nearer the beach, but more to the south, was the carpenter's shop, its marks equally distinctive.

Leaving "the graves," and walking toward Wellington Straits, about four hundred yards, or perhaps less, we came to a mound, or rather a series of mounds, which, considering the Arctic character of the surface at this spot, must have been a work of labor. It inclosed one nearly elliptical area, and one other, which, though separated from the first by a lesser mound, appeared to be connected with it. The spaces thus inclosed abounded in fragmentary remains. Among them I saw a stocking without a foot, sewed up at its edge, and a mitten not so much the worse for use as to have been without value to its owner. Shavings of wood were strewed freely on the southern side of the mound, as if they had been collected there by the continued labor of artificers, and not far from these, a few hundred yards lower down, was the remnant of a garden. Weighing all the signs carefully, I had no doubt that this was some central shore establishment, connected with the squadron, and that the lesser area was used as an observatory, for it had large stones fixed as if to support instruments, and the scantling props still stuck in the frozen soil.

Travelling on about a quarter of a mile further, and in the same direction, we came upon a deposit of more than six hundred preserved-meat cans, arranged in regular order. They had been emptied, and were now

filled with limestone pebbles, perhaps to serve as convenient ballast on boating expeditions.

These were among the more obvious vestiges of Sir John Franklin's party. The minor indications about the ground were innumerable: fragments of canvas, rope, cordage, sail-cloth, tarpaulins; of casks, iron-work, wood, rough and carved; of clothing, such as a blanket lined by long stitches with common cotton stuff, and made into a sort of rude coat; paper in scraps, white, waste, and journal; a small key; a few odds and ends of brass-work, such as might be part of the furniture of a locker; in a word, the numberless reliquæ of a winter resting-place. One of the papers, which I have preserved, has on it the notation of an astronomical sight, worked out to Greenwich time.

With all this, not a written memorandum, or pointing cross, or even the vaguest intimation of the condition or intentions of the party. The traces found at Cape Riley and Beechy were still more baffling. The cairn was mounted on a high and conspicuous portion of the shore, and evidently intended to attract observation; but, though several parties examined it, digging round it in every direction, not a single particle of information could be gleaned. This is remarkable; and for so able and practiced an Arctic commander as Sir John Franklin, an incomprehensible omission.

In a narrow interval between the hills which come down toward Beechy Island, the searching parties of the Rescue and Mr. Murdaugh of our own vessel found the tracks of a sledge clearly defined, and unmistakable both as to character and direction. They pointed to the eastern shores of Wellington Sound, in the same general course with the traces discovered by Penny between Cape Spencer and Point Innes.

Similar traces were seen toward Caswell's Tower and Cape Riley, which gave additional proofs of systematic journeyings. They could be traced through the comminuted limestone shingle in the direction of Cape Spencer; and at intervals further on were scraps of paper, lucifer matches, and even the cinders of the temporary fire. The sledge parties must have been regularly organized, for their course had evidently been the subject of a previous reconnoissance. I observed their runner tracks not only in the limestone crust, but upon some snow slopes further to the north. It was startling to see the evidences of a travel nearly six years old, preserved in intaglio on a material so perishable.

The snows of the Arctic regions, by alternations of congelation and thaw, acquire sometimes an ice-like durability; but these traces had been covered by the after-snows of five winters. They pointed, like the *Sastrugi*, or snow-waves of the Siberians, to the marches of the lost company.

Mr. Griffin, who performed a journey of research along this coast toward the north, found at intervals, almost to Cape Bowden, traces of a passing party. A corked bottle, quite empty, was among these. Reaching a point beyond Cape Bowden, he discovered the indentation or bay which now bears his name, and on whose opposite shores the coast was again seen.

It is clear to my own mind that a systematic reconnoissance was undertaken by Franklin of the upper waters of the Wellington, and that it had for its object an exploration in that direction as soon as the ice would permit.

There were some features about this deserted homestead inexpressibly touching. The frozen trough of an

old water channel had served as the wash-house stream for the crews of the lost squadron. The tubs, such as Jack makes by sawing in half the beef barrels, although no longer fed by the melted snows, remained as the washers had left them five years ago. The little garden, too: I did not see it; but Lieutenant Osborn describes it as still showing the mosses and anemones that were transplanted by its framers. A garden implies a purpose either to remain or to return: he who makes it is looking to the future. The same officer found a pair of Cashmere gloves, carefully "laid out to dry, with two small stones upon the palms to keep them from blowing away." It would be wrong to measure the value of these gloves by the price they could be bought for in Bond Street or Broadway. The Arctic traveler they belonged to intended to come back for them, and did not probably forget them in his hurry.

The facts I have mentioned, almost all of them, have been so ably analyzed already, that I might be excused from venturing any deductions of my own. But it was impossible to review the circumstances as we stood upon the ground without forming an opinion; and such as mine was, it is perhaps best that I should express it here.

In the first place, it is plain that Sir John Franklin's consort, the *Terror*, wintered in 1845-6 at or near the promontory of Beechy; that at least part of her crew remained on board of her; and that some of the crew of the flag-ship, the *Erebus*, if not the ship herself, were also there. It is also plain that a part of one or both these crews was occupied during a portion of the winter in the various pursuits of an organized squadron, at an encampment on the isthmus I have described,

a position which commanded a full view of Lancaster Sound to the east of south, and of Wellington Channel extending north. It may be fairly inferred, also, that the general health of the crews had not suffered severely, three only having died out of a hundred and thirty odd; and that in addition to the ordinary details of duty, they were occupied in conducting and computing astronomical observations, making sledges, preparing their little anti-scorbutic garden patches, and exploring the eastern shore of the channel. Many facts that we ourselves observed made it seem probable that Franklin had not, in the first instance, been able to prosecute his instructions for the Western search; and the examinations made so fully since by Captain Austin's officers have proved that he never reached Cape Walker, Banks' Land, Melville Island, Prince Regent's Inlet, or any point of the sound considerably to the west or southwest. The whole story of our combined operations in and about the channel shows that it is along its eastern margin that the water-leads occur most frequently: natural causes of general application may be assigned for this, some of which will readily suggest themselves to the physicist; but I have only to do here with the recognized fact.

So far I think we proceed safely. The rest is conjectural. Let us suppose the season for renewed progress to be approaching; Franklin and his crews, with their vessels, one or both, looking out anxiously from their narrow isthmus for the first openings of the ice. They come: a gale of wind has severed the pack, and the drift begins. The first clear water that would meet his eye would be close to the shore on which he had his encampment. Would he wait till the continued drift had made the navigation practicable in Lancas-

ter Sound, and then retrace his steps to try the upper regions of Baffin's Bay, which he could not reach without a long circuit; or would he press to the north through the open lead that lay before him? Those who know Franklin's character, his declared opinions, his determined purpose, so well portrayed in the lately published letters of one of his officers, will hardly think the question difficult to answer: his sledges had already pioneered the way. We, the searchers, were ourselves tempted, by the insidious openings to the north in Wellington Channel, to push on in the hope that some lucky chance might point us to an outlet beyond. Might not the same temptation have had its influence for Sir John Franklin? A careful and daring navigator, such as he was, would not wait for the lead to close. I can imagine the dispatch with which the observatory would be dismantled, the armorer's establishment broken up, and the camp vacated. I can understand how the preserved meat cans, not very valuable, yet not worthless, might be left piled upon the shore; how one man might leave his mittens, another his blanket coat, and a third hurry over the search for his lost key. And if I were required to conjecture some explanation of the empty signal cairn, I do not know what I could refer it to but the excitement attendant on just such a sudden and unexpected release from a weary imprisonment, and the instant prospect of energetic and perilous adventure.

CHAPTER XXXII.

THE FIRST AMERICAN EXPEDITION.

(CONTINUED.)

"*August* 28. Strange enough, during the night, Captain Austin, of her majesty's search squadron, with his flag-ship the *Resolute*, entered the same little indentation in which five of us were moored before. His steam-tender, the *Pioneer*, grounded off the point of Beechy Island, and is now in sight, canted over by the ice nearly to her beam ends.

"I called this morning on Sir John Ross, and had a long talk with him. He said that, as far back as 1847, anticipating the 'detention' of Sir John Franklin—I use his own word—he had volunteered his services for an expedition of retrieve, asking for the purpose four small vessels, something like our own; but no one listened to him. Volunteering again in 1848, he was told that his nephew's claim to the service had received a recognition; whereupon his own was withdrawn. 'I told Sir John,' said Ross, 'that my own experience in these seas proved that all these sounds and inlets may, by the caprice or even the routine of seasons, be closed so as to prevent any egress, and that a missing or shut-off party must have some means of falling back. It was thus I saved myself from the abandoned *Victory* by a previously constructed house for wintering, and a boat for temporary refuge.' All this, he says, he pressed on Sir John Franklin before

he set out, and he thinks that Melville Island is now the seat of such a house-asylum. 'For, depend upon it,' he added, 'Franklin will be expecting some of us to be following on his traces. Now, may it be that the party, whose winter quarters we have discovered, sent out only exploring detachments along Wellington Sound in the spring, and then, when themselves released, continued on to the west, by Cape Hotham and Barrow's Straits?' I have given this extract from my journal, though the theory it suggests has since been disproved by Lieutenant M'Clintock, because the tone and language of Sir John Ross may be regarded as characteristic of this manly old seaman.

"I next visited the Resolute. I shall not here say how their perfect organization and provision for winter contrasted with those of our own little expedition. I had to shake off a feeling almost of despondency when I saw how much better fitted they were to grapple with the grim enemy, Cold. Winter, if we may judge of it by the clothing and warming appliances of the British squadron, must be something beyond our power to cope with; for, in comparison with them, we have nothing, absolutely nothing.

"The officers received me, for I was alone, with the cordiality of recognized brotherhood. They are a gentlemanly, well-educated set of men, thoroughly up to the history of what has been done by others, and full of personal resource. Among them I was rejoiced to meet an old acquaintance, Lieutenant Brown, whose admirably artistic sketches I had seen in Haghe's lithotints, at Mr. Grinnell's, before leaving New York. When we were together last, it was among the tropical jungles of Luzon, surrounded by the palm, the cycas, and bamboo, in the glowing extreme of vegeta-

ble exuberance: here we are met once more, in the stunted region of lichen and mosses. He was then a junior, under Sir Edward Belcher: I—what I am yet. The lights and shadows of a naval life are nowhere better, and, alas! nowhere worse displayed, than in these remote accidental greetings.

“Returning, I paid a visit to Penny’s vessels, and formed a very agreeable acquaintance with the medical officer, Dr. R. Anstruther Goodsir, a brother of assistant surgeon Goodsir of Franklin’s flag-ship.

“In commemoration of the gathering of the searching squadrons within the little cove of Beechy Point, Commodore Austin has named it, very appropriately, Union Bay. It is here the Mary is deposited as an asylum to fall back upon in case of disaster.

“The sun is traveling rapidly to the south, so that our recently glaring midnight is now a twilight gloom. The coloring over the hills at Point Innes this evening was sombre, but in deep reds; and the sky had an inhospitable coldness. It made me thoughtful to see the long shadows stretching out upon the snow toward the isthmus of the Graves.

“The wind is from the north and westward, and the ice is so driven in around us as to grate and groan against the sides of our little vessel. The masses, though small, are very thick, and by the surging of the sea have been rubbed as round as pebbles. They make an abominable noise.”

The remaining days of August were not characterized by any incident of note. We had the same alternations of progress and retreat through the ice as before, and without sensibly advancing toward the western shore, which it was now our object to reach. The next extracts from my journal are of the date of September 3d.

“After floating down, warping, to avoid the loose ice, we finally cast off in comparatively open water, and began beating toward Cape Spencer to get round the field. Once there, we got along finely, sinking the eastern shore by degrees, and nearing the undelineated coasts of Cornwallis Island. White whales, narwhals, seals—among them the *Phoca leonina* with his puffed cheeks—and two bears, were seen.

“The ice is tremendous, far ahead of any thing we have met with. The thickness of the upraised tables is sometimes fourteen feet; and the hummocks are so ground and distorted by the rude attrition of the floes, that they rise up in cones like crushed sugar, some of them forty feet high. But that the queer life we are leading—a life of constant exposure and excitement, and one that seems more like the ‘roughing it’ of a land party than the life of shipboard—has inured us to the eccentric fancies of the ice, our position would be a sleepless one.

“*September 4, 2 A.M.* Was awakened by Captain De Haven to look at the ice: an impressive sight. We were fast with three anchors to the main floe; and now, though the wind was still from the northward, and therefore in opposition to the drift, the floating masses under the action of the tide came with a westward trend directly past us. Fortunately, they were not borne down upon the vessels; but, as they went by in slow procession to the west, our sensations were, to say the least, *sensations*. It was very grand to see up-piled blocks twenty feet and more above our heads, and to wonder whether this fellow would strike our main-yard or clear our stern. Some of the moving hummocks were thirty feet high. They grazed us; but a little projection of the main field to windward shied them off.

"We were seated cosily around our little table in the cabin, imagining our harbor of land ice perfectly secure, when we were startled by a crash. We rushed on deck just in time to see the solid floe to windward part in the middle, liberate itself from its attachment to the shore, and bear down upon us with the full energy of the storm. Our lee bristled ominously half a ship's length from us, and to the east was the main drift. The Rescue was first caught, nipped astern, and lifted bodily out of water; fortunately, she withstood the pressure, and rising till she snapped her cable, launched into open water, crushing the young ice before her. The Advance, by hard warping, drew a little closer to the cove; and, a moment after, the ice drove by, just clearing our stern. Commodore Austin's vessels were imprisoned in the moving fragments, and carried helplessly past us. In a very little while they were some four miles off."

The summer was now leaving us rapidly. The thermometer had been at 21° and 23° for several nights, and scarcely rose above 32° in the daytime. Our little harbor at Barlow's Inlet was completely blocked in by heavy masses; the new ice gave plenty of sport to the skaters; but on shipboard it was uncomfortably cold. As yet we had no fires below; and, after drawing around me the India-rubber curtains of my berth, with my lamp burning inside, I frequently wrote my journal in a freezing temperature. "This is not very cold, no doubt"—I quote from an entry of the 8th—"not very cold to your forty-five minus men of Arctic winters; but to us poor devils from the zone of the liriodendrons and peaches, it is rather cool for the September month of water-melons. My bear with his arsenic swabs is a solid lump, and some birds that

are waiting to be skinned are absolutely rigid with frost."

In the afternoon of this day, the 8th, we went to work, all hands, officers included, to cut up the young ice and tow it out into the current: once there, the drift carried it rapidly to the south. We cleared away in this manner a space of some forty yards square, and at five the next morning were rewarded by being again under weigh. We were past Cape Hotham by breakfast-time on the 9th, and in the afternoon were beating to the west in Lancaster Sound.

"The sound presented a novel spectacle to us; the young ice glazing it over, so as to form a viscid sea of sludge and *tickly-benders*, from the northern shore to the pack, a distance of at least ten miles. This was mingled with the drift floes from Wellington Channel; and in them, steaming away manfully, were the *Resolute* and *Pioneer*. The wind was dead ahead; yet, but for the new ice, there was a clear sea to the west. What, then, was our mortification, first, to see our pack-bound neighbors force themselves from their prison and steam ahead dead in the wind's eye, and, next, to be overhauled by *Penny*, and passed by both his brigs. We are now the last of all the searchers, except perhaps old Sir John, who is probably yet in Union Bay, or at least east of the straits.

"The shores along which we are passing are of the same configuration with the coast to the east of Beechy Island; the cliffs, however, are not so high, and their bluff appearance is relieved occasionally by terraces and shingle beach. The lithological characters of the limestone appear to be the same.

"We are all together here, on a single track but little wider than the Delaware or Hudson. There is no

getting out of it, for the shore is on one side and the fixed ice close on the other. All have the lead of us, and we are working only to save a distance. Ommanney must be near Melville by this time: pleasant, very!

“Closing memoranda for the day: 1. I have the rheumatism in my knees; 2. I left a bag containing my dress suit of uniforms, and, what is worse, my winter suit of furs, and with them my double-barrel gun, on board Austin’s vessel. The gale of the 7th has carried him and them out of sight.

“*September 10.* Unaccountable, most unaccountable, the caprices of this ice-locked region! Here we are again all together, even Ommanney with the rest. The Resolute, Intrepid, Assistance, Pioneer, Lady Franklin, Sophia, Advance, and Rescue; Austin, Ommanney, Penny, and De Haven, all anchored to the ‘fast’ off Griffith’s Island. The way to the west completely shut out.”

“*September 11, Wednesday.* Snow, light and fleecy, covering the decks, and carried by our clothes into our little cabin. The moisture of the atmosphere condenses over the beams, and trickles down over the lockers and bedding. We are still along side of the fixed ice off Griffith’s Island, and the British squadron under Commodore Austin are clustered together within three hundred yards of us. Penny, like an indefatigable old trump, as he is, is out, pushing, working, groping in the fog. The sludge ice, that had driven in around us and almost congealed under our stern, is now by the ebb of the tide, or at least its change, carried out again, although the wind still sets toward the floe.

“At three the Rescue parted her cable’s hold, and was carried out to sea, leaving two men, her boat, and her anchors behind. We snapped our stern-cable, lost our anchor, swung out, but fortunately held by the forward line. All the English vessels were in similar peril, the Pioneer being at one time actually free; and Commodore Austin, who in the Resolute occupied the head of the line, was in momentary fear of coming down upon us. Altogether I have seldom seen a night of greater trial. The wind roared over the snow floes, and every thing about the vessel froze into heavy ice stalactites. Had the main floe parted, we had been carried down with the liberated ice. Fortunately, every thing held; and here we are, safe and sound. The Rescue was last seen beating to windward against the gale, probably seeking a lee under Griffith’s Island. This morning the snow continues in the form of a fine cutting drift, the water freezes wherever it touches, and the thermometer has been at no time above 17°.

“*September 12, 10 P.M.* Just from deck. How very dismal every thing seems! The snow is driven like sand upon a level reach, lifted up in long curve lines, and then obscuring the atmosphere with a white darkness. The wind, too, is howling in a shrill minor, singing across the hummock ridges. The eight vessels are no longer here. The Rescue is driven out to sea, and poor Penny is probably to the southward. Five black masses, however, their cordage defined by rime and snow, are seen with their snouts shoved into the shore of ice: cables, chains, and anchors are covered feet below the drift, and the ships adhere mysteriously, their tackle completely invisible. Should any of us break away, the gale would carry us into streams of heavy floating ice; and our running rig-

ging is so coated with icicles as to make it impossible to work it. The thermometer stands at 14° .

"At this temperature the young ice forms in spite of the increasing movement of the waves, stretching out from the floe in long, zigzag lines of smoothness resembling watered silk. The loose ice seems to have a southerly and easterly drift; and, from the increasing distance of Griffith's Island, seen during occasional intervals, we are evidently moving *en masse* to the south.

"Now when you remember that we are in open sea, attached to precarious ice, and surrounded by floating streams; that the coast is unknown, and the ice forming inshore, so as to make harbors, if we knew of them, inaccessible, you may suppose that our position is far from pleasant. One harbor was discovered by a lieutenant of the Assistance some days ago, and named Assistance Harbor, but that is out of the question; the wind is not only a gale, but ahead. Had we the quarters of Capua before us, we should be unable to reach them. It is a windward shore.

"11 P.M. Captain De Haven reports ice forming fast: extra anchors are out; thermometer $+8^{\circ}$. The British squadron, under Austin, have fires in full blast; we are without them still.

"12 M. In bed, reading or trying to read. The gale has increased; the floes are in upon us from the eastward; and it is evident that we are all of us drifting bodily, God knows where, for we have no means of taking observations.

"September 13, 10 A.M. Found, on awaking, that at about three this morning the squadron commenced getting under weigh. The rime-coated rigging was cleared; the hawsers thashed; the ice-clogged boats

hauled in; the steamers steamed, and off went the rest of us as we might. This step was not taken a whit too soon, if it be ordained that we are yet in time; for the stream-ice covers the entire horizon, and the large floe or main which we have deserted is barely separated from the drifting masses. The Rescue is now the object of our search. Could she be found, the captain has determined to turn his steps homeward.

"11 20 A.M. We are working, *i. e.*, beating our way in the narrow leads intervening irregularly between the main ice and the drift. We have gained at least two miles to windward of Austin's squadron, who are unable, in spite of steamers, to move along these dangerous passages like ourselves. Our object is to reach Griffith's Island, from which we have drifted some fifteen miles with the main ice, and then look out for our lost consort.

"The lowest temperature last night was $+5^{\circ}$, but the wind makes it colder to sensation. We are grinding through newly-formed ice three inches thick; the perfect consolidation being prevented by its motion and the wind. Even in the little fireless cabin in which I now write, water and coffee are freezing, and the mercury stands at 29° .

"The navigation is certainly exciting. I have never seen a description in my Arctic readings of any thing like this. We are literally running for our lives, surrounded by the imminent hazards of sudden consolidation in an open sea. All minor perils, nips, bumps, and sunken bergs are discarded; we are staggering along under all sail, forcing our way while we can. One thump, received since I commenced writing, jerked the time-keeper from our binnacle down

the cabin hatch, and, but for our strong bows, seven and a half solid feet, would have stove us in. Another time, we cleared a tongue of the main pack by riding it down at eight knots. Commodore Austin seems caught by the closing floes. This is really sharp work.

"4 P.M. We continued beating toward Griffith's Island, till, by doubling a tongue of ice, we were able to force our way. The English seemed to watch our movements, and almost to follow in our wake, till we came to a comparatively open space, about the area of Washington Square, where we stood off and on, the ice being too close upon the eastern end of Griffith's Island to permit us to pass. Our companions in this little vacancy were Captain Ommanney's Assistance; Osborne's steam tender the Pioneer, and Kater's steamer the Intrepid. Commodore Austin's vessel was to the southward, entangled in the moving ice, but momentarily nearing the open leads.

While thus boxing about on one of our tacks, we neared the north edge of our little opening, and were hailed by the Assistance with the glad intelligence of the Rescue close under the island. Our captain, who was at his usual post, conning the ship from the foretop-sail yard, made her out at the same time, and immediately determined upon boring the intervening ice. This was done successfully, the brig bearing the hard knocks nobly. Strange to say, the English vessels, now joined by Austin, followed in our wake—a compliment, certainly, to De Haven's ice-mastership.

We were no sooner through, than signal was made to the Rescue to 'cast off,' and our ensign was run up from the peak: the captain had determined upon attempting a return to the United States.

In a little while we had the Rescue in tow, and were

heading to the east. She had had a fearful night of it after leaving us. She beat about, short-handed, clogged with ice, and with the thermometer at 8°. The snow fell heavily, and the rigging was a solid, almost unmanageable lump. Steering, or rather beating, she made, on the evening of the 12th, the southern edge of Griffith's Island, and by good luck and excellent management succeeded in holding to the land hummocks. She had split her rudder-post so as to make her *unworkable*, and now we have her in tow. An anchor with its fluke snapped—her best bower; and her little boat, stove in by the ice, was cut adrift.

We were now homeward bound, but a saddened homeward bound for all of us. The vessels of our gallant brethren soon lost themselves in the mist, and we steered our course with a fresh breeze for Cape Hotham.

The night gave us now three hours of complete darkness. It was danger to run on, yet equally danger to pause. Grim winter was following close upon our heels; and even the captain, sanguine and fearless in emergency as he always proved himself, as he saw the tenacious fields of sludge and pancake thickening around us, began to feel anxious. Mine was a jumble of sensations. I had been desirous to the last degree that we might remain on the field of search, and could hardly be dissatisfied at what promised to realize my wish. Yet I had hoped that our wintering would be near our English friends, that in case of trouble or disease we might mutually sustain each other. But the interval of fifty miles between us, in these inhospitable deserts, was as complete a separation as an entire continent; and I confess that I looked at the dark shadows closing around Barlow's Inlet,

the prison from which we cut ourselves on the seventh, just six days before, with feelings as sombre as the landscape itself.

The sound of our vessel crunching her way through the new ice is not easy to be described. It was not like the grinding of the old formed ice, nor was it the slushy scraping of sludge. We may all of us remember, in the skating frolics of early days, the peculiar reverberating outcry of a pebble, as we tossed it from us along the edges of an old mill-dam, and heard it dying away in echoes almost musical. Imagine such a tone as this, combined with the whir of rapid motion, and the rasping noise of close-grained sugar. I was listening to the sound in my little den, after a sorrowful day, close upon zero, trying to warm up my stiffened limbs. Presently it grew less, then increased, then stopped, then went on again, but jerking and irregular; and then it waned, and waned, and waned away to silence.

Down came the captain: "Doctor, the ice has caught us: we are frozen up." On went my furs at once. As I reached the deck, the wind was there blowing stiff, and the sails were filled and puffing with it. It was not yet dark enough to hide the smooth surface of ice that filled up the horizon, holding the American expedition in search of Sir John Franklin imbedded in its centre. There we were, literally frozen tight in the mid-channel of Wellington's Straits.

The region, which ten days before was teeming with animal life, was now almost deserted. We saw but one narwhal and a few seal. The Ivory gull too, a solitary traveler, occasionally flitted by us; but the season had evidently wrought its change.

Several flocks of the snow bunting had passed over

us while we were attached to the main ice off Griffith's Island, and a single raven was seen from the Rescue at her holding grounds. The Brent geese, however, the dovebies, the divers, indeed all the anatidæ, the white whales, the walrus, the bearded and the hirsute seal, the white bear, whatever gave us life and incident, had vanished.

For some days after this, an obscurity of fog and snow made it impossible to see more than a few hundred yards from the ship. The little area remained fast bound, the ice bearing us readily, though a very slight motion against the sides of the vessel seemed to show that it was not perfectly attached to the shores. But as I stood on deck in the afternoon of the 16th, watching the coast to the east of us, as the clouds cleared away for the first time, it struck me that its configuration was unknown to me. By-and-by, Cape Beechy, the isthmus of the Graves, loomed up; and we then found that we were a little to the north of Cape Bowden.

The next two days this northward drift continued without remission. The wind blew strong from the southward and eastward, sometimes approaching to a gale; but the ice-pack around us retained its tenacity, and increased rapidly in thickness.

Yet every now and then we could see that at some short distance it was broken by small pools of water, which would be effaced again, soon after they were formed, by an external pressure. At these times our vessels underwent a nipping on a small scale. The smoother ice-field that held us would be driven in, piling itself in miniature hummocks about us, sometimes higher than our decks, and much too near them to leave us a sense of security against their further ad-

vance. The noises, too, of whining puppies and swarming bees made part of these demonstrations, much as when the heavier masses were at work, but shriller perhaps, and more clamorous.

I was aroused at midnight of the 16th by one of these onsets of the enemy, crunching and creaking against the ship's sides till the masses ground themselves to powder. Our vessel was trembling like an ague-fit under the pressure ; and when so pinched that she could not vibrate any longer between the driving and the stationary fields, making a quick, liberating jump above them that rattled the movables fore and aft. As it wore on toward morning, the ice, now ten inches thick, kept crowding upon us with increased energy ; and the whole of the 17th was passed in a succession of conflicts with it.

The 18th began with a nipping that promised more of danger. The banks of ice rose one above another till they reached the line of our bulwarks. This, too, continued through the day, sometimes lulling for a while into comparative repose, but recurring after a few minutes of partial intermission. While I was watching this angry contest of the ice-tables, as they clashed together in the darkness of early dawn, I saw for the first time the luminous appearance, which has been described by voyagers as attending the collision of bergs. It was very marked ; as decided a phosphorescence as that of the fire-fly, or the fox-fire of the Virginia meadows.

Still, amid all the tumult, our drift was toward the north. From the bearings of the coast, badly obtained through the fogs, it was quite evident that we had passed beyond any thing recorded on the charts. Cape Bowden, Parry's furthest headland, was at least twen-

ty-five miles south of us; and our old landmarks, Cape Hotham and Beechy, had entirely disappeared. Even the high bluffs of Barlow's Inlet had gone. I hardly know why it was so, but this inlet had some how or other been for me an object of special aversion: the naked desolation of its frost-bitten limestone, the cavernous recess of its cliffs, the cheerlessness of its dark shadows, had connected it, from the first day I saw it, with some dimly-remembered feeling of pain. But how glad we should all of us have been, as we floated along in hopeless isolation, to find a way open to its grim but protecting barriers.

"*September 20.* I have been keeping the first watch, and anxiously observing the ice; for I am no sailor, and in emergency can only wake my comrades. The darkness is complete.

"We are now, poor devils! drifting northward again. Creatures of habit, those who were anxious have forgotten anxiety: glued fast here in a moving mass, we eat, and drink, and sleep, unmindful of the morrow. It is almost beyond a doubt that, if we find our way through the contingencies of this Arctic autumn, we must spend our winter in open sea. Many miles to the south, Captain Back passed a memorable term of vigil and exposure. Here, however, I do not anticipate such encounters with drifting floes as are spoken of in Hudson's Bay. The centre of greatest cold is too near us and the communication with open sea too distant.

"I was in the act of writing the above, when a startling sensation, resembling the spring of a well-drawn bow, announced a fresh movement. Running on deck, I found it blowing a furious gale, and the ice again in motion. I use the word motion inaccurately. The

field, of which we are a part, is always in motion; that is, drifting with wind or current. It is only when other ice bears down upon our own, or our own ice is borne in against other floes, that pressure and resistance make us conscious of motion.

"The ice was again in motion. The great expanse of recently-formed solidity, already bristling with hummocks, had up to this moment resisted the enormous incidence of a heavy gale. Suddenly, however, the pressure increasing beyond its strength, it yielded. The twang of a bow-string is the only thing I can compare it to. In a single instant the broad field was rent asunder, cracked in every conceivable direction, tables ground against tables, and masses piled over masses. The sea seemed to be churning ice.

"By the time I had yoked my neck in its *serape*, and got up upon deck, the ice had piled up a couple of feet above our bulwarks. In less than another minute it had toppled over again, and we were floating helplessly in a confused mass of broken fragments. Fortunately the Rescue remained fixed; our hawser was fast to her stern, and by it we were brought side by side again. Night passed anxiously; *i. e.*, slept in my clothes, and dreamed of being presented to Queen Victoria.

I am reluctant to burden my pages with the wild, but scarcely varied incidents of our continued drift through Wellington Channel. We were yet to be familiarized with the strife of the ice-tables, now broken up into tumbling masses, and piling themselves in angry confusion against our sides—now fixed in chaotic disarray by the fields of new ice that imbedded them in a single night—again, perhaps, opening in treacherous pools, only to close round us with a force

that threatened to grind our brigs to powder. I shall have occasion enough to speak of these things hereafter. I give now a few extracts from my journal; some of which may perhaps have interest of a different character, though they cannot escape the saddening monotony of the scenes that were about us.

I begin with a partial break-up that occurred on the 23d.

“September 23. How shall I describe to you this pressure, its fearfulness and sublimity! Nothing that I have seen or read of approaches it. The voices of the ice and the heavy swash of the overturned hummock-tables are at this moment dinning in my ears. ‘All hands’ are on deck fighting our grim enemy.

“Fourteen inches of solid ice thickness, with some half dozen of snow, are, with the slow uniform advance of a mighty propelling power, driving in upon our vessel. As they strike her, the semi-plastic mass is impressed with a mould of her side, and then, urged on by the force behind, slides upward, and rises in great vertical tables. When these attain their utmost height, still pressed on by others, they topple over, and form a great embankment of fallen tables. At the same time others take a downward direction, and when pushed on, as in the other case, form a similar pile underneath. The side on which one or the other of these actions takes place for the time, varies with the direction of the force, the strength of the opposite or resisting side, the inclination of the vessel, and the weight of the superincumbent mounds; and as these conditions follow each other in varying succession, the vessel becomes perfectly imbedded after a little while in crumbling and fractured ice.

“Perhaps no vessel has ever been in this position

but our own. With matured ice, nothing of iron or wood could resist such pressure. As for the British vessels, their size would make it next to impossible for them to stand. Back's 'Winter' is the only thing I have read of that reminds me of our present predicament. No vessel has ever been caught by winter in these waters.

"We are lifted bodily eighteen inches out of water. The hummocks are reared up around the ship, so as to rise in some cases a couple of feet above our bulwarks—five feet above our deck. They are very often ten and twelve feet high. All hands are out, laboring with picks and crowbars to overturn the fragments that threaten to overwhelm us. Add to this darkness, snow, cold, and the absolute destitution of surrounding shores.

"*September 26.* The hummocks around us still remain without apparent motion, heaped up like snow-covered barriers of street rioters. We are wedged in a huge mass of tables, completely out of water, cradled by ice. I wish it would give us an even keel. We are eighteen inches higher on one quarter than the other.

"Afar off, skipping from hummock to hummock, I saw a black fox. Poor desolate devil! what did he, so far from his recorded home, seven miles from even the naked snow-hills of this dreary wilderness? In the night-time I heard him bark. They set a trap for him; but I secretly placed a bigger bait outside, without a snare-loop or trigger. In the morning it was gone, and the dead-fall had fallen upon no fox. How the poor, hungry thing must have enjoyed his supper!

Our position, at the end of September, thanks to the rapidly increasing cold, gave promise of a certain

degree of security and rest. The Advance had been driven, by the superior momentum of the floes that pressed us on one side, some two hundred and fifty feet into the mass of less resisting floes on the other; the Rescue meanwhile remaining stationary; and the two vessels were fixed for a time on two adjacent sides of a rectangle, and close to each other.

We felt that we were fixed for the winter. We arranged our rude embankments of ice and snow around us, began to deposit our stores within them, and got out our felt covering that was to serve as our winter roof. The temperature was severe, ranging from $1^{\circ} 5$, and 4° to $+ 10^{\circ}$: but the men worked with the energy and hope too, of pioneer settlers, when building up their first home in our Western forests.

“October 1, Tuesday. To-day the work of breaking hold commenced. The coal immediately under the main hatch was passed up in buckets, and some five tons piled upon the ice. The quarter-boats were hauled about twenty paces from our port-bow, and the sails covered and stacked; in short, all hands were at work preparing for the winter. Little had we calculated the caprices of Arctic ice.

‘About ten o’clock A. M. a large crack opened nearly east and west, running as far as the eye could see, sometimes crossing the ice-pools, and sometimes breaking along the hummock ridges. The sun and moon will be in conjunction on the 3d; we had notice, therefore, that the spring tides are in action.

“Captain Griffin had been dispatched with Mr. Lovell before this, to establish on the shore the site for a depôt of provisions: at one o’clock a signal was made to recall them. At two P.M., seeing a seal, I ran out upon the ice; but losing him, was tempted to continue

on about a mile to the eastward. The wind, which had been from the westward all the morning, now shifted to the southward, and the ice-tables began to be again in motion. The *humming of bees* and upheaving hummocks, together with exploding cracks, warned me back to the vessel.

“At 3.20, while we were at dinner, commenting with some anxiety upon the condition of things without, that unmistakable monitor, the ‘*young puppies*,’ began. Running on deck, we found a large fissure, nearly due north and south, in line with the Advance. A few minutes after, the entire floe on our starboard side was moving, and the ice breaking up in every direction.

“The emergency was startling enough. All hands turned to, officers included. The poor land party, returning at this moment, tired and dinnerless, went to work with the rest. Vreeland and myself worked like horses. Before dark, every thing was on board except the coal; and of this, such were the unwearied efforts of our crew, that we lost but a ton or two.

“*October 3.* I write at midnight. Leaving the deck, where I have been tramping the cold out of my joints, I come below to our little cabin. As I open the hatch, every thing seems bathed in dirty milk. A cloud of vapor gushes out at every chink, and, as the cold air travels down, it is seen condensing deeper and deeper. The thermometer above is at 7° below zero.

“The brig and the ice around her are covered by a strange black obscurity—not a mist, nor a haze, but a peculiar, waving, palpable, unnatural darkness: it is the frost-smoke of Arctic winters. Its range is very low. Climbing to the yard-arm, some thirty feet above the deck, I looked over a great horizon of black smoke, and above me saw the blue heavens without a blemish.

"*October 4.* The open pools can no longer be called pools; they are great rivers, whose hummock-lined shores look dimly through the haze. Contrasted with the pure white snow, their waters are black even to inkiness, and the silent tides, undisturbed by ripple or wash, pass beneath a pasty film of constantly forming ice. The thermometer is at 10° . Away from the ship, a long way, I walked over the older ice to a spot where the open river was as wide as the Delaware. Here, after some crevice-jumping and *tickly-bender* crossing, I set myself behind a little rampart of hummocks, watching for seals.

"As I watched, the smoke, the frost-smoke, came down in wreaths, like the lambent tongues of burning turpentine seen without a blaze. I was soon enveloped in crapy mist.

"To shoot seal, one must practice the Esquimaux tactics of much patience and complete immobility. It is no fun, I assure you after full experience, to sit motionless and noiseless as a statue, with a cold iron musket in your hands, and the thermometer 10° below zero. But by-and-by I was rewarded by seeing some overgrown Greenland calves come within shot. I missed. After another hour of cold expectation, they came again. Very strange are these seal. A countenance between the dog and the mild African ape—an expression so like that of humanity, that it makes gun-murderers hesitate. At last, at long shot, I hit one. God forgive me!

"*October 6, Sunday.* A dismal day; the wind howling, and the snow, fine as flour, drifting into every chink and cranny. The cold quite a nuisance, although the mercury is up again to $+6^{\circ}$. It is blowing a gale, What if the floe, in which we are providentially glued.

should take it into its head to break off, and carry us on a cruise before the wind!

"12 Midnight. They report us adrift. Wind a gale from the northward and westward. An odd cruise this! The American expedition fast in a lump of ice about as big as Washington Square, and driving, like the shanty on a raft, before a howling gale.

"*October* 8. To-day seemed like a wave of the handkerchief from our receding summer. Winter is in every thing. Yet the skies came back to us with warm ochres and pinks, and the sun, albeit from a lowly altitude, shone out in full brightness. It was a mockery of warmth, however, scarcely worthy the unpretending sincerity of the great planet; for the mercury, exposed to the full radiance of his deceitful glare, rose but two degrees from $+7^{\circ}$ to 9° . In spite of this, the day was beautiful to remember, as a type of the sort of thing which we once shared with the world from which we are shut out; a parting picture, to think about during the long night. These dark days, or rather the dark day, will soon be on us. The noon shadows of our long masts almost lose themselves in the distance.

"A little white fox was caught alive in a trap this morning. He was an astute-visaged little scamp; and although the chains of captivity, made of span-yarn and leather, set hardly upon him, he could spare abundant leisure for bear bones and snow. He would drink no water. His cry resembled the inter-paroxysmal yell of a very small boy undergoing spanking. The note came with an impulsive vehemence, that expressed not only fear and pain, but a very tolerable spice of anger and ill-temper.

"He was soon reconciled, however. The very next day he was tame enough to feed from the hand, and

had lost all that startled wildness of look which is supposed to characterize his tribe. He was evidently unused to man, and without the educated instinct of flight. Twice, when suffered to escape from the vessel, he was caught in our traps the same night. Indeed, the white foxes of this region—we caught more than thirty of them—seemed to look at us with more curiosity than fear. They would come directly to the ship's side; and, though startled at first when we fired at them, soon came back. They even suffered us to approach them almost within reach of the hand, ran around us, as we gave the halloo, in a narrow circle, but stopped as soon as we were still, and stared us inquisitively in the face. One little fellow, when we let him loose on the ice after keeping him prisoner for a day or two, scampered back again incontinently to his cubby-hole on the deck. There may be matter of reflection for the naturalist in this. Has this animal no natural enemy but famine and cold? The foxes ceased to visit us soon after this, owing probably to the uncertain ice between us and the shore: they are shrewd ice-masters.

We remained during the rest of this month ice-cradled, and drifting about near the outlet of Wellington Channel. Our thoughts turned irresistibly to the broad expanse of Lancaster Sound, which lay wild and rugged before us, and to the increasing probability that it was to be our field of trial during the long dark winter—perhaps our final home.

With this feeling came an increasing desire to communicate with our late associates of Union Bay. I had volunteered some weeks before to make this traverse, and had busied myself with arrangements to carry it out. The Rescue's India-rubber boat was to car-

ry the party through the leads, and, once at the shore, three men were to press on with a light tent and a few days' provisions. The project, impracticable perhaps from the first, was foiled for a time by a vexatious incident. I had made my tent of thin cotton cloth, so that it weighed, when completed, but fourteen pounds, soaking it thoroughly in a composition of caoutchouc, ether, and linseed oil, the last in quantity. After it was finished and nearly dried, I wrapped it up in a dry covering of coarse muslin, and placed it for the night in a locked closet, at some distance from the cook's galley, where the temperature was between 80° and 90° . In the morning it was destroyed. The wrapper was there, retaining its form, and not discolored; but the outer folds of the tent were smoking; and, as I unrolled it, fold after fold showed more and more marks of combustion, till at the centre it was absolutely charred. There was neither flame nor spark.

The moon made its appearance on the 13th of October. At first it was like a bonfire, warming up the ice with a red glare; but afterward, on the 15th, when it rose to the height of 4° , it silvered the hummocks and frozen leads, and gave a softened lustre to the snow, through which our two little brigs stood out in black and solitary contrast. The stars seemed to have lost their twinkle, and to shine with concentrated brightness as if through gimlet-holes in the cobalt canopy. The frost-smoke scarcely left the field of view. It generally hung in wreaths around the horizon; but it sometimes took eccentric forms; and one night, I remember, it piled itself into a column at the west, and *Aquila* flamed above it like a tall beacon-light.

The month of November found us oscillating still with the winds and currents in the neighborhood of Beechy Island. Helpless as we were among the floating masses, we began to look upon the floe that carried us as a protecting barrier against the approaches of others less friendly; and as the month advanced, and the chances increased of our passing into the sound, our apprehensions of being frozen up in the heart of the ice-pack gave place to the opposite fear of a continuous drift.

"*November 29.* The doubt is gone. Our floe, ice-cradle, safeguard, has been thrown round. Its eastern margin is grinding its way to the northward, and the west is already pointing to the south. Our bow is to Baffin's Bay, and we are traveling toward it. So far, ours has been a mysterious journeying. For two months and more, not a sail has fluttered from our frozen spars; yet we have passed from Lancaster Sound into the highest latitude of Wellington Channel, one never attained before, and have been borne back again past our point of starting, along a capriciously varied line of drift.

"On deck; looming up in the very midst of the haze, land! so high and close on our port beam, that we felt like men under a precipice. We could see the vertical crevices in the limestone, the recesses contrasting in black shadow. What land is this? Is it the eastern line of Cape Riley, or have we reached Cape Ricketts?

"There is one thing tolerably certain: the Grinnell expedition is quite as likely to be searched for hereafter as to search. Poor Sir John Franklin! this night-drift is an ugly omen.

“Do you remember, in the Spanish coasting craft, down about Barcelona and the Balearics, the queer little pictures of Saint Nicholas we used to see pasted up over the locker—a sort of mythic effigy, which the owner looked upon pretty much as some of our old commodores do the barometer, a mysterious something, which he sneers at in fair weather, but is sure, in the strong faith of ignorance, to appeal to in foul! Well, very much such a Saint Anthony have we down in the cabin here, staring us always in the face. Not a vermillion-daubed puerility, with a glory in Dutch leaf stretching from ear to ear; but a good, genuine, hearty representative of English flesh and blood, a mouth that speaks of strong energies as well as a kindly heart, and an eye—the other one is spoiled in the lithography—that looks stern will. Many a time in the night have I discoursed with him, as he looked out on me from his gutta percha frame—‘Sir John Franklin; presented by his wife;’ and sometimes I have imagined how and where I was yet to shake the glorious old voyager by the hand. I see him now while I am writing; his face is darkened by the lamp-smoke that serves us for daylight and air, and he seems almost disheartened. So far as help and hope of it are afloat in this little vessel, Sir John, well you may be!

“It is Sunday: we have had religious service as usual, and after it that relic of effete absurdity, the reading of the ‘Rules and Regulations.’

“We had the aurora about 7 P.M. The thermometer at -33° and falling; barometer, Aneroid, 30° . 74:

“*December 2.* Drifting down the sound. Every thing getting ready for the chance of a hurried good-bye to our vessels. Pork, and sugar, and bread put up

in small bags to fling on the ice. Every man his knapsack and change of clothing. Arms, bear-knives, ammunition out on deck, and sledges loaded. Yet this thermometer, at -30° , tells us to stick to the ship while we can.

"This packing up of one's carpet-bag in a hurry requires a mighty discreet memory. I have often wondered that seamen in pushing off from a wreck left so many little wants unprovided for; but I think I understand it now. After bestowing away my boots, with the rest of a walking wardrobe, in a snugly-lashed bundle, I discovered by accident that I had left my stockings behind.

"4 P.M. Brooks comes down while we are dining to say we are driving east like a race-horse, and a crack ahead: 'All hands on deck!' We had heard the grindings last night, and our floe in the morning was cut down to a diameter of three hundred yards: we had little to spare of it. But the new chasm is there, already fifteen feet wide, and about twenty-five paces from our bows, stretching across at right angles with the old cleft of October the 2d.

"Our floe, released from its more bulky portion, seems to be making rapidly toward the shore. This, however, may be owing to the separated mass having an opposite motion, for the darkness is intense. Our largest snow-house is carried away; the disconsolate little cupola, with its flag of red bunting, should it survive the winter, may puzzle conjectures for our English brethren.

"Mr. Griffin and myself walked through the gloom to the seat of hummock action abeam of the Rescue.

The next four days were full of excitement and anxiety. One crack after another passed across our

floe, still reducing its dimensions, and at one time bringing down our vessel again to an even keel. An hour afterward, the chasms would close around us with a sound like escaping steam. Again they would open under some mysterious influence; a field of ice from two to four inches thick would cover them; and then, without an apparent change of causes, the separated sides would come together with an explosion like a mortar, craunching the newly-formed field, and driving it headlong in fragments for fifty feet upon the floe till it piled against our bulwarks. Every thing betokened a crisis. Sledges, boats, packages of all sorts, were disposed in order; contingencies were met as they approached by new delegations of duty; every man was at work, officer and seaman alike; for necessity, when it spares no one, is essentially democratic, even on ship-board. The Rescue, crippled and thrown away from us to the further side of a chasm, was deserted, and her company consolidated with ours. Our own brig groaned and quivered under the pressure against her sides. I give my diary for December 7.

"*December 7, Saturday.* The danger which surrounds us is so immediate, that in the bustle of preparation for emergency I could not spend a moment upon my journal. Now the little knapsack is made up again, and the blanket sewed and strapped. The little home Bible at hand, and the ice-clothes ready for a jump.



Dec. 1.



Dec. 4.



Dec. 6.



Dec. 7.

"The above is a rough idea of our last three days' positions and changes.

"The ice, as I have sketched it, December 7, began to close at 11 A.M., and, at the same time, the brig was driven toward the open crack of December 4 (c). At 1 P.M. this closed on us with fearful nipping.

"1 P.M. Ran on deck. The ice was comparatively quiescent when I attempted to write; but it recommenced with a steady pressure, which must soon prove irresistible.

My journal does not tell the story; but it is worth noting, as it illustrates the sedative effect of a protracted succession of hazards. Our brig had just mounted the floe, and as we stood on the ice watching her vibration, it seemed so certain that she must come over on her beam-ends, that our old boatswain, Brooks, called out to "stand from under." At this moment it occurred to one of the officers that the fires had not been put out, and that the stores remaining on board would be burned by the falling of the stoves. Swinging himself back to the deck, and rushing below, he found two persons in the cabin; the officer who had been relieved from watch-duty a few minutes before, quietly seated at the mess-table, and the steward as quietly waiting on him. "You are a meal ahead of me," he said; "you didn't think I was going out upon the ice without my dinner."

“*December 21, Saturday.* To-day at noon we saw, dimly looming up from the redness of the southern horizon, a low range of hills; among them some cones of great height, mountains of a character differing from the naked table-lands of the northern coast. The land on the other side of Croker's Bay, with one high headland, supposed to be Cape Warrender, is in view. From all of which it is clear that we are drifting regularly on toward Baffin's Bay.

“An opening occurred last night in the ice to the northward. It is not more than a hundred yards from us, and it is already seventy wide.

“Our men are hard at work preparing for the Christmas theatre, the arrangements exclusively their own. But to-morrow is a day more welcome than Christmas—the solstitial day of greatest darkness, from which we may begin to date our returning light. It makes a man feel badly to see the faces around him bleaching into waxen paleness. Until to-day, as a looking-glass does not enter into an Arctic toilet, I thought I was the exception, and out of delicacy said nothing about it to my comrades. One of them, introducing the topic just now, told me, with an utter unconsciousness of his own ghostliness, that I was the palest of the party. So it is, ‘All men think all men,’ &c. Why, the good fellow is as white as a cut potato!”

In truth, we were all of us at this time undergoing changes unconsciously. The hazy obscurity of the nights we had gone through made them darker than the corresponding nights of Parry. The complexions of my comrades, and my own too, as I found soon afterward, were toned down to a peculiar waxy paleness. Our eyes were more recessed, and strangely clear. Complaints of shortness of breath became general.

"*December 22, Sunday.* The solstice!—the midnight of the year! It commences with a new movement in the ice, the open lead of yesterday piling up into hummocks on our port-beam. No harm done.

"The wind is from the west, increasing in freshness since early in the morning. The weather overcast; even the moon unseen, and no indications of our drift. We could not read print, not even large newspaper type, at noonday. We have been unable to leave the ship unarmed for some time on account of the bears. We remember the story of poor Barentz, one of our early predecessors. One of our crew, Blinn, a phlegmatic Dutchman, walked out to-day toward the lead, a few hundred yards off, in search of a seal-hole. Suddenly a seal rose close by him in the sludge-ice: he raised his gun to fire; and, at the same instant, a large bear jumped over the floe, and by a dive followed the seal. Blinn's musket snapped. He was glad to get on board again.

"*December 25.* 'Y' Christmas of y' Arctic cruisers! Our Christmas passed without a lack of the good things of this life. 'Goodies' we had galore; but that best of earthly blessings, the communion of loved sympathies, these Arctic cruisers had not. It was curious to observe the depressing influences of each man's home thoughts, and absolutely saddening the effort of each man to impose upon his neighbor and be very boon and jolly. We joked incessantly, but badly, and laughed incessantly, but badly too; ate of good things, and drank up a moiety of our Heidsiek; and then we sang negro songs, wanting only tune, measure, and harmony, but abounding in noise; and after a closing bumper to Mr. Grinnell, adjourned with creditable jollity from table to the theatre.

"It was on deck, of course, but veiled from the sky by our felt covering. A large ship's ensign, stretched from the caboose to the bulwarks, was understood to hide the stage, and certain meat-casks and candle-boxes represented the parquet. The thermometer gave us -6° at first; but the favoring elements soon changed this to the more comfortable temperature of -4° .

"Never had I enjoyed the tawdry quackery of the stage half so much. The theatre has always been to me a wretched simulation of realities; and I have too little sympathy with the unreal to find pleasure in it long. Not so our Arctic theatre: it was one continual frolic from beginning to end.

"The 'BLUE DEVILS:' God bless us! but it was very, very funny. None knew their parts, and the prompter could not read glibly enough to do his office. Every thing, whether jocose, or indignant, or commonplace, or pathetic, was delivered in a high-tragedy monotone of despair; five words at a time, or more or less, according to the facilities of the prompting. Megrim, with a pair of seal-skin boots, bestowed his gold upon the gentle Annette; and Annette, nearly six feet high, received it with mastodonic grace. Annette was an Irishman named Daly; and I might defy human being to hear her, while balanced on the heel of her boot, exclaim, in rich masculine brogue, 'Och, feather!' without roaring. Bruce took the Landlord, Benson was James, and the gentle Annette and the wealthy Megrim were taken by Messrs. Daly and Johnson.

"After this followed the Star Spangled Banner; then a complicated Marseillaise by our French cook, Henri; then a sailor's hornpipe by the diversely-talented Bruce; the orchestra—Stewart, playing out the inter-

vals on the Jews-harp from the top of a lard-cask. In fact, we were very happy fellows. We had had a foot-race in the morning over the midnight ice for three purses of a flannel shirt each, and a splicing of the main-brace. The day was night, the stars shining feebly through the mist.

“But even here that kindly custom of Christmas-gifting was not forgotten. I found in my morning stocking a jack-knife, symbolical of my altered looks, a piece of Castile soap—this last article in great request—a Jews-harp, and a string of beads! On the other hand, I prescribed from the medical stores two bottles of Cognac, to protect the mess from indigestion. So passed Christmas. Thermometer, minimum, -16° ; maximum, -7° . Wind west.

“*December 28, Saturday.* From my very soul do I rejoice at the coming sun. Evidences not to be mistaken convince me that the health of our crew, never resting upon a very sound basis, must sink under the continued influences of darkness and cold. The temperature and foulness of air in the between-deck Tartarus can not be amended, otherwise it would be my duty to urge a change. Between the smoke of lamps, the dry heat of stoves, and the fumes of the galley, all of them unintermitting, what wonder that we grow feeble. The short race of Christmas-day knocked up all our officers except Griffin. It pained me to see my friend Lovell, our strongest man, fainting with the exertion. The symptoms of scurvy among the crew are still increasing, and becoming more general. Faces are growing pale; strong men pant for breath upon ascending a ladder; and an indolence akin to apathy seems to be creeping over us. I long for the light. Dear, dear sun, no wonder you are worshiped!

"11. Can read ordinary over-sized print. Started on a walk, the first time for twenty-odd days. Saw the great lead, and traveled it for a couple of miles expanding into a plain of recent ice.

"M. Passed noon on the ice. Can read diamond type. Stars of the first magnitude only visible. Saturn magnificent!

"1 P.M. With difficulty read large type. The clouds gathering in black stratus over the red light to the south.

"2. The heavens studded with stars in their groupings. Night is again over every thing, although the minor stars are not yet seen.

"Since the first of this month, we have drifted in solitude one hundred and seventy miles, skirting the northern shores of Lancaster Sound. Baffin's Bay is ahead of us, its current setting strong toward the south. What will be the result when the mighty masses of these two Arctic seas come together!"

1851, *January* 1, Wednesday. The first day of 1851 set in cold, the thermometer at -28° , and closing at -31° . We celebrated it by an extra dinner, a plum-cake unfrosted for the occasion, and a couple of our residuary bottles of wine. But there was no joy in our merriment: we were weary of the night, as those who watch for the morning.

It was not till the 3d that the red southern zone continued long enough to give us assurance of advancing day. Then, for at least three hours, the twilight enabled us to walk without stumbling. I had a feeling of racy enjoyment as I found myself once more away from the ship, ranging among the floes, and watching the rivalry of day with night in the zenith. There was the sunward horizon, with its evenly-dis-

tributed bands of primitive colors, blending softly into the clear blue overhead ; and then, by an almost magic transition, night occupying the western sky. Stars of the first magnitude, and a wandering planet here and there, shone dimly near the debatable line ; but a little further on were all the stars in their glory. The northern firmament had the familiar beauty of a pure winter night at home. The Pleiades glittered "like a swarm of fire-flies tangled in a silver-braid," and the great stars that hang about the heads of Orion and Taurus were as intensely bright as if day was not looking out upon them from the other quarter of the sky. I had never seen night and day dividing the hemisphere so beautifully between them.

On the 8th we had, of course, our national festivities, and remembered freshly the hero who consecrated the day in our annals. The evening brought the theatricals again, with extempore interludes, and a hearty splicing of the main-brace. It was something new, and not thoroughly gladsome, this commemoration of the victory at New Orleans under a Polar sky. There were men not two hundred miles from us, now our partners in a nobler contest, who had bled in this very battle. But we made the best of the occasion ; and if others some degrees further to the south celebrated it more warmly, we had the thermometer on our side, with its -20° , a normal temperature for the "laudatur et alget."

But the sun was now gradually coming up toward the horizon : every day at meridian, and for an hour before and after, we were able to trace our progress eastward by some known headland. We had passed Cape Castlereagh and Cape Warrender in succession, and were close on the meridian of Cape Osborn. The

disruptions of the ice which we had encountered so far, had always been at the periods of spring-tide. The sun and moon were in conjunction on the 21st of December; and, adopting Captain Parry's observation, that the greatest efflux was always within five days after the new moon, we had looked with some anxiety to the closing weeks of that month. But they had gone by without any unusual movement; and there needed only an equally kind visitation of the January moon to give us our final struggle with the Baffin's Bay ice by daylight.

Yet I had remarked that the southern shore of Lancaster Sound extended much further out to the eastward than the northern did; and I had argued that we might begin to feel the current of Baffin's Bay in a very few days, though we were still considerably to the west of a line drawn from one cape to the other. The question received its solution without waiting for the moon.

I give from my journal our position in the ice on the 11th of January:

"January 11, Saturday. The floe in which we are now imbedded has been steadily increasing in solidity for more than a month. Since the 8th of December, not a fracture or collision has occurred to mar its growth. The eye can not embrace its extent. Even from the mast-head you look over an unbounded expanse of naked ice, bristling with contorted spires, and ridged by elevated axes of hummocks. The land on either side rises above our icy horizon; but to the east and west, there is no such interception to our winteriness."

"The brig remains as she was tossed at our providential escape of last month, her nose burrowing in the

THE ADVANCE IN FEBRUARY.

WINTER IN THE PACK.

snow, and her stern perched high above the rubbish. Walking deck is an up and down hill work. She retains, too, her list to starboard. Her bare sides have been banked over again with snow to increase the warmth, and a formidable flight of nine ice-block steps admits us to the door-way of her winter cover. The stores, hastily thrown out from the vessel when we expected her to go to pieces, are still upon the little remnant of old floe on our port or northern side. The Rescue is some hundred yards off to the south of east."

The next day things underwent a change. The morning was a misty one, giving us just light enough to make out objects that were near the ship; the wind westerly, as it had been for some time, freshening perhaps to a breeze. The day went on quietly till noon, when a sudden shock brought us all up to the deck. Running out upon the ice, we found that a crack had opened between us and the Rescue, and was extending in a zigzag course from the northward and eastward to the southward and westward. At one o'clock it had become a chasm eight feet in width; and as it continued to widen, we observed a distinct undulation of the water about its edges. At three, it had expanded into a broad sheet of water, filmed over by young ice, through which the portions of the floe that bore our two vessels began to move obliquely toward each other. Night closed round us, with the chasm reduced to forty yards and still narrowing; the Rescue on her port-bow, two hundred yards from her late position; the wind increasing, and the thermometer at -19° .

My journal for the next day was written at broken intervals; but I give it without change of form:

"*January 13, 4 A.M.* All hands have been on deck since one o'clock, strapped and harnessed for a fare-

well march. The water-lane of yesterday is covered by four-inch ice; the floes at its margin more than three feet thick. These have been closing for some time by a sliding, grinding movement, one upon the other; but every now and then coming together more directly, the thinner ice clattering between them, and marking their new outline with hummock ridges. They have been fairly in contact for the last hour: we feel their pressure extending to us through the elastic floe in which we are cradled. There is a quivering, vibratory hum about the timbers of the brig, and every now and then a harsh rubbing creak along her sides, like waxed cork on a mahogany table. The hummocks are driven to within four feet of our counter, and stand there looming fourteen feet high through the darkness. It has been a horrible commotion so far, with one wild, booming, agonized note, made up of a thousand discords; and now comes the deep stillness after it, the mysterious ice-pulse, as if the energies were gathering for another strife.

“6½ A.M. Another pulse! the vibration greater than we have ever yet had it. If our little brig had an animated centre of sensation, and some rude force had torn a nerve-trunk, she could not feel it more — she fairly shudders. Looking out to the north, this ice seems to heave up slowly against the sky in black hills; and as we watch them rolling toward us, the hills sink again, and a distorted plain of rubbish melts before us into the night. Ours is the contrast of utter helplessness with illimitable power.

“9.50 A.M. Brooks and myself took advantage of the twilight at nine o'clock to cross the hummocky fields to the Rescue. I can not convey an impression of the altered aspects of the floe. Our frozen lane has

disappeared, and along the line of its recent course the ice is heaped up in blocks, tables, lumps, powder, and rubbish, often fifteen feet high. Snow covered the decks of the little vessel, and the disorder about it spoke sadly of desertion. Foot-prints of foxes were seen in every imaginable corner; and near the little hatchway, where we had often sat in comfortable good-fellowship, the tracks of a large bear had broken the snow crust in his efforts to get below.

“The Rescue has met the pressure upon her port-bow and fore-foot. Her bowsprit, already maimed by her adventure off Griffith’s Island, is now completely forced up, broken short off at the gammoning. The ice, after nipping her severely, has piled up round her three feet above the bulwarks. We had looked to her as our first asylum of retreat; but that is out of the question now; she can not rise as we have done, and any action that would peril us again must bear her down or crush her laterally.

“The ice immediately about the Advance is broken into small angular pieces, as if it had been dashed against a crag of granite. Our camp out on the floe, with its reserve of provisions and a hundred things besides, memorials of scenes we have gone through, or appliances and means for hazards ahead of us, has been carried away bodily. My noble specimen of the Arctic bear is floating, with an escort of bread barrels, nearly half a mile off.

“The thermometer records only -17° ; but it blows at times so very fiercely that I have never felt it so cold: five men were frost-bitten in the attempt to save our stores.

“9 P.M. We have had no renewal of the pressure since half past six this morning. We are turning in;

the wind blowing a fresh breeze, weather misty, thermometer at -23° ."

The night brought no further change; but toward morning the cracks, that formed before this a sort of net-work all about the vessel, began to open. The cause was not apparent: the wind had lulled, and we saw no movement of the floes. We had again the same voices of complaint from the ship, but they were much feebler than yesterday; and in about an hour the ice broke up all round her, leaving an open space of about a foot to port, indented with the mould of her form. The brig was loose once more at the sides; but she remained suspended by the bows and stern from hummocks built up like trestles, and canted forward still five feet and a quarter out of level. Every thing else was fairly afloat: even the India-rubber boat, which during our troubles had found a resting-place on a sound projection of the floe close by us, had to be taken in.

This, I may say, was a fearful position; but the thermometer, at a mean of -23° and -24° , soon brought back the solid character of our floating raft. In less than two days every thing about us was as firmly fixed as ever. But the whole topography of the ice was changed, and its new configuration attested the violence of the elements it had been exposed to. Nothing can be conceived more completely embodying inhospitable desolation. From mast-head the eye traveled wearily over a broad champaigne of undulating ice, crowned at its ridges with broken masses, like breakers frozen as they rolled toward the beach. Beyond these, you lost by degrees the distinctions of surface. It was a great plain, blotched by dark, jagged shadows, and relieved only here and there by a hill

of upheaved rubbish. Still further in the distance came an unvarying uniformity of shade, cutting with saw-toothed edge against a desolate sky.

Yet there needed no after-survey of the ice-field to prove to us what majestic forces had been at work upon it. At one time on the 13th, the hummock-ridge astern advanced with a steady march upon the vessel. Twice it rested, and advanced again—a dense wall of ice, thirty feet broad at the base and twelve feet high, tumbling huge fragments from its crest, yet increasing in mass at each new effort. We had ceased to hope; when a merciful interposition arrested it, so close against our counter that there was scarcely room for a man to pass between. Half a minute of progress more, and it would have buried us all. As we drifted along five months afterward, this stupendous memento of controlling power was still hanging over our stern.

We had lost all indications of a shore, and had obviously passed within the influences of Baffin's Bay. We were on the meridian of 75° ; yet, though the recent commotions could be referred to nothing else but the conflict of the two currents, we had made very little southing, if any, and had seen no bergs. But on the 14th the wind edged round a little more to the northward, and at six o'clock in the morning of the 15th we could hear a squeezing noise among the ice-fields in that direction. By this time we had become learned interpreters of the ice-voices. Of course, we renewed our preparations for whatever might be coming. Every man arranged his knapsack and blanket-bag over again with the practiced discretion of an expert. Our extra clothing sledge, carefully repacked, was made free on deck. The India-rubber boat, only useful in this solid waste for crossing occasional chasms, was launched out upon the ice for the third time.

The appearances which heralded the sun's return had a degree of interest for us which it is not easy to express in words. I have referred more than once already to the effects of the long-continued night on the health of our crowded ship's company. It was even more painful to notice its influence on their temper and spirits. Among the officers this was less observable. Our mess seemed determined, come what might, to maintain toward each other that honest courtesy of manner, which those who have sailed on long voyages together know to be the rarest and most difficult proof of mutual respect. There were of course seasons when each had his home thoughts, and revolved perhaps the growing probabilities that some other Arctic search party might seek in vain hereafter for a memorial of our own; yet these were never topics of conversation. I do not remember to have been saddened by a boding word during all the trials of our cruise.

With the men, however, it was different. More deficient in the resources of education, and less restrained by conventional usages or the principle of honor from communicating to each other what they felt, all sympathized in the imaginary terrors which each one conjured up.

We were called up one evening by the deck-watch to see for ourselves a "ball of fire floating up and down above the ice-field." It was there sure enough, a disk of reddish flame, varying a little in its outline, and flickering in the horizon like a revolving light at a distance. I was at first as much puzzled as the men; but glancing at Orion, I soon saw that it was nothing else than our old dog-star friend, bright Sirius, come back to us. Refraction had raised him above the hills, so as to bring him to view a little sooner than we expected. His color was rather more lurid than when

he left us, and the refraction, besides distorting his outline, seemed to have given him the same oblateness or horizontal expansion which we observe in the disks of the larger planets when nearing the horizon.

For some days the sun-clouds at the south had been changing their character. Their edges became better defined, their extremities dentated, their color deeper as well as warmer; and from the spaces between the lines of stratus burst out a blaze of glory, typical of the longed-for sun. He came at last: it was on the 29th. My journal must tell the story of his welcoming, at the hazard of its seeming extravagance: I am content that they shall criticise it who have drifted for more than twelve weeks under the night of a Polar sky.

“January 29. Going on deck after breakfast at eight this morning, I found the dawning far advanced. The whole vault was bedewed with the coming day; and, except Capella, the stars were gone. The southern horizon was clear. We were certain to see the sun, after an absence of eighty-six days. It had been arranged on board that all hands should give him three cheers for a greeting; but I was in no mood to join the sallow-visaged party. I took my gun, and walked over the ice about a mile away from the ship to a solitary spot, where a great big hummock almost hemmed me in, opening only to the south. There, Parsee fashion, I drank in the rosy light, and watched the horns of the crescent extending themselves round toward the north. There was hardly a breath of wind, with the thermometer at only -19° , and it was easy, therefore, to keep warm by walking gently up and down. I thought over and named aloud every one of our little circle, F. and M., T. and P., B. and J., and our dear, bright little W.; wondered a while whether

there were not some more to be remembered, and called up one friend or relative after another, but always came back to the circle I began with.

“Very soon the deep crimson blush, lightening into a focus of incandescent white, showed me that the hour was close at hand. Mounting upon a crag, I saw the crews of our one ship formed in line upon the ice. My mind was still tracing the familiar chain of home affections, and the chances that this one or the other of its links might be broken already. I bethought me of the *Sortes Virgilianæ* of my school-boy days: I took a piece of candle paper pasteboard, cut it with my bowie-knife into a little carbine target, and on one side of this marked all our names in pencil, and on the other a little star. Presently the sun came: never, till the grave-sod or the ice covers me, may I forego this blessing of blessings again! I looked at him thankfully with a great globus in my throat. Then came the shout from the ship—three shouts—cheering the sun. I fixed my little star-target to the floe, walked backward till it became nearly invisible; and then, just as the completed orb fluttered upon the horizon, fired my ‘*salut.*’ I cut M in half, and knocked the T out of Tom. They shall draw lots for it if ever I get home; for many, many years may come and go again before the shot of an American rifle signalizes in the winter of Baffin’s Bay the conjunction of sunrise, noon-day, and sunset.

“*January 30.* The crew determined to celebrate ‘*El regresado del sol,*’ which, according to old Costa, our Mahonese seaman, was a more holy day than Christmas or All-Saints. Mr. Bruce, the diversely talented, favored us with a new line of theatrical exhibition, a *divertissement* of domestic composition, ‘The Country-

man's first Visit to Town ;' followed by a pantomime. I copy the play-bill from the original as it was tacked against the main-mast :

ARCTIC THEATRE.

To be performed, on the night of Thursday, the 30th day of January, the Comio Play of the COUNTRYMAN. After which, a PANTOMIME.

To begin with

A SongBy R. Bruce.

THE COUNTRYMAN.

Countryman.....R. Baggs.
LandladyC. Berry.
Servant.....T. Dunning.

PANTOMIME.

Harlequin.....James Johnson.
Old ManR. Bruce.
Rejected LoverA. Canot.
ColumbineJames Smith.

Doors to be opened at 8 o'clock. Curtain to rise a quarter past 8 punctually
No admittance to Children ; and no Ladies admitted without an escort.

STAGE MANAGER,
S. BENJAMIN.

The strictest order will be observed both inside and outside.

We sat down as usual on the preserved-meat boxes, which were placed on deck, ready strapped and becketed (*nauticé* for trunk-handled) for flinging out upon the ice. The affair was altogether creditable, however, and every body enjoyed it. Here is an outline of the pantomime, after the manner of the newspapers. An old man (Mr. Bruce) possessed mysterious, semi-magical, and wholly comical influence over a rejected

lover (M. Auguste Canot, ship's cook), and Columbine (Mr. Smith) exercised the same over the old man. Harlequin (Mr. Johnson), however, by the aid of a split-shingle wand and the charms of his "motley wear," secures the affections of Columbine, cajoles the old man, persecutes the forlorn lover, and carries off the prize of love; the fair Columbine, who had been industriously chewing tobacco, and twirling on the heel of her boot to keep herself warm, giving him a sentimental kiss as she left the stage. A still more sentimental song, sung in seal-skin breeks and a "*norwester*," and a potation all round of hot-spiced rum toddy, concluded the entertainments.

"It is Washington's birth-day, when 'hearts should be glad;' but we have no wine for the dinner-table, and are too sick for artificial merriment without it. Our crew, however, good patriotic wretches, got up a theatrical performance, 'The Irish Attorney;' Pierce O'Hara taken by the admirable Bruce, our Crichton. The ship's thermometer outside was at -46° . Inside, among audience and actors, by aid of lungs, lamps, and housings, we got as high as 30° below zero, only sixty-two below the freezing point!! probably the lowest atmospheric record of a theatrical representation.

"It was a strange thing altogether. The condensation was so excessive that we could barely see the performers: they walked in a cloud of vapor. Any extra vehemence of delivery was accompanied by volumes of smoke. The hands steamed. When an excited Thespian took off his hat, it smoked like a dish of potatoes. When he stood expectant, musing a reply, the vapor wreathed in little curls from his neck. This was thirty degrees lower than the lowest of Parry's North Georgian performances.

The lowest temperature we recorded during the cruise was on the 22d of this month, when the ship's thermometer gave us -46° ; my offship spirit, -52° .

Cold as it was, our mid-day exercise was never interrupted, unless by wind and drift storms. We felt the necessity of active exercise; and although the effort was accompanied with pains in the joints, sometimes hardly bearable, we managed, both officers and crew, to obtain at least three hours a day. The exercise consisted of foot-ball and sliding, followed by regular games of romps, leap-frog, and tumbling in the snow. By shoveling away near the vessel, we obtained a fine bare surface of fresh ice, extremely glib and durable. On this we constructed a skating-ground and admirable slides. I walked regularly over the floes, although the snows were nearly impassable.

With all this, aided by hosts of hygienic resources, feeble certainly, but still the best at my command, scurvy advanced steadily. This fearful disease, so often warded off when in a direct attack, now exhibited itself in a cachexy, a depraved condition of system sad to encounter. Pains, diffuse, and non-local, were combined with an apathy and lassitude which resisted all attempts at healthy excitement.

These, of course, were not confined to the crew alone: out of twenty-four men, but five were without ulcerated gums and blotched limbs; and of these five, strange to say, four were cooks and stewards. All the officers were assailed. Old pains were renewed, old wounds opened; even old bruises and sprains, received at barely-remembered periods back, came to us like dreams.

The close of the month found this state of things on the increase, and the strength of the party still waning.

CHAPTER XXXIII.

THE FIRST AMERICAN EXPEDITION.

(CONTINUED.)

Our brig was still resting on her cradle, and her consort on the floe a short distance off, when the first month of spring came to greet us. We had passed the latitude of 72° .

To prepare for our closing struggle with the ice-fields, or at least divide its hazards, it was determined to refit the Rescue. To get at her hull, a pit was sunk in the ice around her, large enough for four men to work in at a time, and eight feet deep, so as to expose her stern, and leave only eighteen inches of the keel imbedded. This novel dry-dock answered perfectly. The hull was inspected, and the work of repair was pressed so assiduously, that in three days the stern-post was in its place, and the new bowsprit ready for shipping. We had now the chances of two ships again in case of disaster.

The 19th gave us a change of scene. I was aroused from my morning sleep by the familiar voice of Mr. Murdaugh, as he hurried along the half-deck: "Ice opening"—"Open leads off our starboard quarter"—"Frost-smoke all around us!" Five minutes afterward, Henri had been summoned from the galley; and, carbine in hand, I was tumbling over the hummocks.

"*March* 20. Thursday, the 20th of March, opens with a gale, a regular gale. On reaching deck after breakfast, I found the wind from the southeast, the thermometer at zero, and rising. These southeast storms are looked upon as having an important influence on the ice. They are always warm, and by the sea which they excite at the southern margin of the pack, have a great effect in breaking the floes. Mr. Olrik told me that they were anxiously looked for on the Greenland coast as precursors of open water. The date of the southeast gale last year, at Uppernavik, was April 25th. Our thermometer gave $+5^{\circ}$ at noon-day, $+7^{\circ}$ at one, and $+8^{\circ}$ at three o'clock!!

"This is the heaviest storm we have had since entering Lancaster Sound, exactly seven months and a day ago. The snow is whirled in such quantities, that our thick felt housing seems as if of gauze: it not only covers our decks, but drives into our clothes like fine dust or flour. A plated thermometer was invisible fourteen feet from the eye: from the distance of ten paces off on our quarter, a white opacity covers every thing, the compass-stand, fox-traps, and all beyond: the Rescue, of course, is completely hidden. This heavy snow-drift exceeds any thing that I had conceived, although many of my Arctic English friends had discoursed to me eloquently about their perils and discomforts. As to facing it in a stationary position, nothing human could; for a man would be buried in ten minutes. Even in reaching our little Tusculum, we tumble up to our middle, in places where a few minutes before the very ice was laid bare. The entire topography of our ice is changing constantly.

"7 P.M. 'The wind is howling.'

“*March* 23, Sunday. After divine service, started for the ice-openings. We are now in the centre of an area, which we estimated roughly as four miles from north to south, and a little more east and west. On reaching what was yesterday's sea-beach, I was forced to recant in a measure my convictions as to the force of the opposing floes.

“A new crack was reported at one o'clock, about the third of a mile from our ship; and the bearings of the sun showed that our brig had, for the first time since entering Baffin's Bay, rotated considerably to the northward. Here were two subjects for examination. So, as soon as dinner was over, I started with Davis and Willie, two of my scurvy henchmen, on a walk to the openings. Reaching the recent crack, we found the ice five feet four inches thick, and the black water, in a clear streak a foot wide, running to the east and west. I had often read of Esquimaux being carried off by the separation of these great floes; but, knowing that our guns could call assistance from the brig, we jumped over and hurried on. We were well paid.

“I was tempted to stay too long. The wind sprang up suddenly. The floe began to move. I thought of the crack between me and the ship, and started off. The walking, however, was very heavy, and my scurvy patients stiff in the extensors. By the time I reached the crack, it had opened into a chasm, and a river as broad as the Wissahiccon ran between me and our ship. After some little anxiety—not much—I saw our captain ordering a party to our relief. The sledges soon appeared, dragged by a willing party; the India rubber boat was lowered into the lead, and the party ferried over.

"April 21, Monday. I have more than common cause for thankfulness. A mere accident kept me from starting last night to secure our bear. Had I done so, I would probably have spared you reading more of my journal. The ice over which we traveled so carelessly on Saturday has become, by a sudden movement, a mass of floating rubbish.

"In the walk of this morning, which startled me with the change, I saw for the first time a seal upon the ice. This looks very summer-like. He was not accessible to our guns. To-day, for the first time too, the gulls were flying over the renovated water. Coming back we saw fresh bear tracks. How wonderful is the adaptation which enables a quadruped, to us associated inseparably with a land existence, thus to inhabit an ice-covered ocean. We are at least eighty miles from the nearest land, Cape Kater; and channels innumerable must intervene between us and terra firma. Yet this majestic animal, dependent upon his own predatory resources alone, and, defying cold as well as hunger, guided by a superb instinct, confides himself to these solitary, unstable ice-fields.

"There is something very grand about this tawny savage; never leaving this utter destitution, this frigid inhospitableness—coupling in May, and bringing forth in Christmas time—a gestation carried on all of it below zero, more than half of it in Arctic darkness—living in perpetual snow, and dependent for life upon a never-ending activity—using the frozen water as a raft to traverse the open seas, that the water *unfrozen* may yield him the means of life. No time for hibernation has this Polar tiger: his life is one great winter."

"*June 5, Thursday.* We notice again this morning the movement in the trench alongside. The floating scum of rubbish advances and recedes with a regularity that can only be due to some equable undulation from without to the north. We continue perched up, just as we were after our great lift of last December. A more careful measurement than we had made before, gave us yesterday, between our height aft and depression forward, a difference of level of 6 feet 4 inches. This inclination tells in a length of 83 feet—about one in thirteen.

"P.M. The BREAK-UP AT LAST! A little after five this afternoon, Mr. Griffin left us for the Rescue, after

TOPOGRAPHY OF THE FLOE, MAY 31.

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|--|--|
| A. Advance. | B B. Shorter diameter, $3\frac{1}{2}$ miles. |
| R. Recue. | C C. Longer diameter, $5\frac{1}{2}$ miles. |
| Distance between the vessels, 500 yards. | |

making a short visit. He had hardly gone before I heard a hail and its answer, both of them in a tone of more excitement than we had been used to for some time past; and the next moment, the cry, 'Ice cracking ahead!'

"Murdaugh and myself reached the deck just in time to see De Haven crossing our gangway. We followed. Imagine our feelings when, midway between the two vessels, we saw Griffin with the ice separating before him, and at the same instant found a crack tracing its way between us, and the water spinning up to the surface. 'Stick by the floe. Good-by! What news for home?' said he. One jump across the chasm, a hearty God-bless-you shake of the hand, a long jump back, and a little river divided our party.

"Griffin made his way along one fissure and over another. We followed a lead that was open to our starboard beam, each man for himself. In half a minute or less came the outcry, 'She's breaking out: all hands aboard!' and within ten minutes from Griffin's first hail, while we were yet scrambling into our little Ark of Refuge, the whole area about us was divided by irregular chasms in every direction.

"All this was at half past five. At six I took a bird's-eye sketch from aloft. Many of the fissures were already some twenty paces across. Conflicting forces were at work every where; one round-house moving here, another in an opposite direction, the two vessels parting company. Since the night of our Lancaster Sound commotion, months ago, the Rescue had not changed her bearing: she was already on our port-beam. Every thing was change.

"Our brig, however, had not yet found an even keel.

BIRD'S-EYE VIEW OF FLOE, JUNE 5.

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|-------------|--|
| A. Advance. | D. Floe adhering to the Advance. |
| B. Rescue. | C. Path between brigs before break-up. |
| | H H. Hummocks. |

The enormous masses of ice, thrust under her stern by the action of repeated pressures, had glued themselves together so completely, that we remained cradled in a mass of ice exceeding twenty-five feet in solid depth. Many of these tables were liberated by the swell, and rose majestically from their recesses, striking the ship, and then escaping above the surface for a moment, with a sudden vault.

“To add to the novelty of our situation, two cracks coming together obliquely, met a few yards astern of us, cleaving through the heavy ice.

"*June* 8, Sunday. Even keel again!! Once more floating ship-fashion, in a ship's element. It was between twelve and one o'clock this morning. Murdaugh went down upon the fragment, which was still adhering to our starboard side. He had hardly rested his weight upon it, when, with certain hurried, scarcely premonitory grindings, it cleared itself. He had barely time to scramble up the brig's side, tearing his nails in the effort, before, with crash and turmoil, it tumbled up to the surface, letting us down once more into clear water. When I reached the deck, I could hardly realize the level, horizontal condition of things, we have been accustomed to this up and down hill work so long.

" 9 P.M. At 1 o'clock P.M. the wind freshened from the northward, enough to make sail. We cast off, and renewed the old times process of boring, standing irregularly among the fragments to the southward and eastward. We received some heavy bumps, but kept under weigh until 6 P.M., when an impenetrable ice-fog caused us to haul up to a heavy floe, to which we are now fast by three anchors: We estimate our progress at six miles. The Rescue is not visible.

" From the heavy floe to which we are secured we obtained fresh *thawed* water. This is the first time since the 15th of September that I have drunk water liquefied without fire. Eight months and twenty-four days: think of that, dear strawberry and cream eating family!

It had been determined by our commander that we should refresh at Whale Fish Islands, and then hasten back to Melville Bay, the North Water, Lancaster Sound, and Wellington Channel; and certainly there was no one on board who did not enter heart and soul

into the scheme. It was in pursuance of it that we were now bending our course to the east.

The circumstances that surrounded us, the daily incidents, our destination and purpose, were the same as when approaching the Sukkertoppen a year before. There were the same majestic fleets of bergs, the same legions of birds of the same varieties, the same anxious look-out, and rapid conning, and fearless encounter of ice-fields. Every thing was unchanged, except the glowing confidence of young health at the outset of adventure. We had taken our seasoning: the experience of a winter's drift had quieted some of our enthusiasm. But we felt, as veterans at the close of a campaign, that with recruited strength we should be better fitted for the service than ever. All, therefore, looked at the well-remembered cliffs, that hung over Kronprinsen, with the sentiment of men approaching home for the time, and its needed welcomes.

We reached them on the 16th. Mr. Murdaugh, and myself, and four men, and three bottles of rum, were dispatched to communicate with the shore. As we rowed in to the landing-place, the great dikes of injected syenite stood out red and warm against the cold gray gneiss, and the moss gullies met us like familiar grass-plots. Esquimaux crowded the rocks, and dogs barked, and children yelled. A few lusty pulls, and after nine months of drift, and toil, and scurvy, we were once more on terra firma.

God forgive me the revulsion of unthankfulness! I ought to have dilated with gratitude for my lot.

Winter had been severe. The season lagged. The birds had not yet begun to breed. Faces were worn, and forms bent. Every body was coughing. In one hut, a summer lodge of reindeer and seal skins, was

a dead child. It was many months since I had looked at a corpse. The poor little thing had been for once washed clean, and looked cheerfully. The father leaned over it weeping, for it was a boy; and two little sisters were making lamentation in a most natural and savage way.

I gave the corpse a string of blue beads, and bought a pair of seal-skin boots for twenty-five cents; and we rowed back to the brig. In a very little while we were under sail for Godhaven.

We were but five days recruiting at Godhaven. It was a shorter stay than we had expected; but we were all of us too anxious to regain the searching ground to complain. We made the most of it, of course. We ate inordinately of eider, and codfish, and seal, to say nothing of a hideous-looking toad fish, a *Lepodogaster*, that insisted on patronizing our pork-baited lines; chewed bitter herbs, too, of every sort we could get; drank largely of the smallest of small-beer; and danced with the natives, teaching them the polka, and learning the pee-oo-too-ka in return. But on the 22d, by six o'clock in the morning, we were working our way again to the north.

We passed the hills of Disco in review, with their terraced summits, simulating the Ghauts of Hindostan; the green-stone cliffs round Omenak's Fiord, the great dockyard of bergs; and Cape Cranstoun, around which they were clustered like a fleet waiting for convoy. They were of majestic proportions; and as we wound our way tortuously among them, one after another would come into the field of view, like a temple set to be the terminus of a vista. At one time we had the whole Acropolis looking down upon us in silver; at another, our Philadelphia copy of the Par-

thenon, the monumental Bank of the United States, stood out alone. Then, again, some venerable Cathedral, with its deep vaults and hoary belfries, would spread itself across the sky; or perhaps some wild combination of architectural impossibilities.

We moved so slowly that I had time to sketch several of these dreamy fabrics. The one which is engraved on the opposite page was an irregular quadrangle, projected at the extremity of a series of ice-structures, like the promontory that ends an isthmus: it was crowned with ramparts turreted by fractures; and at the water-line a great barreled arch went back into a cavern, that might have fabled as the haunt of sea-kings or smugglers.

Off Storoë, a white fox (*C. lagopus*) came to us on the loose ice: his legs and the tip of his tail were black. He was the first we had seen on the Greenland coast.

He was followed the next day by a party of Esquimaux, who visited us from Pröven, dragging their kayacks and themselves over seven miles of the pack, and then paddling merrily on board. For two glasses of rum and a sorry ration of salt-pork, they kept turning somersets by the dozen, making their egg-shell skiffs revolve sideways by a touch of the paddle, and hardly disappearing under the water before they were heads up again, and at the gangway to swallow their reward.

The inshore ice opened on the thirtieth, and toward evening we left the hospitable moorage of our iceberg, and made for the low, rounded rocks, which the Hosky pointed out to us as the seat of the settlement. The boats were out to tow us clear of the floating rubbish, as the light and variable winds made their help nec-

essary, and we were slowly approaching our anchorage, when a rough yawl boarded us. She brought a pleasant company, Unas the schoolmaster and parish priest, Louisa his sister, the gentle Amalia, Louisa's cousin, and some others of humbler note.



The baptismal waters had but superficially regenerated these savages: their deportment, at least, did not conform to our nicest canons. For the first five minutes, to be sure, the ladies kept their faces close covered with their hands, only withdrawing them to blow their noses, which they did in the most primitive and picturesque manner. But their modesty thus assured, they felt that it needed no further illustration. They volunteered a dance, avowed to us confidentially that they had educated tastes—Amalia that she smoked, Louisa that she tolerated the more enlivening liquids, and both that their exercise in the open air had made a slight refection altogether acceptable. Hospitality is the virtue of these wild regions: our hard tack, and cranberries, and rum were in requisition at once.

It is not for the host to tell tales of his after-dinner company. But the truth of history may be satisfied without an intimation that our guests paid niggard

honors to the jolly god of a milder clime. The veriest prince, of bottle memories, would not have quarreled with their heel-taps. * * *

We were inside the rocky islands of Präven harbor as our watches told us that another day had begun. The time was come for parting. The ladies shed a few kindly tears as we handed them to the stern-seats: their learned kinsman took a recumbent position below the thwarts, which favored a continuance of his nap; and the rest of the party were bestowed with seaman-like address—all but one unfortunate gentleman, who, having protracted his festive devotions longer than usual, had resolved not to “go home till morning.”

The case was a difficult one; but there was no help for it. As the sailors passed him to the bottom of the boat, and again out upon the beach, he made the air vocal with his indignant outcries. The dogs—I have told you of the dogs of these settlements, how they welcomed our first arrival—joined their music with his. The Prävenese came chattering out into the cold, like chickens startled from their roost. The governor was roused by the uproar. And in the midst of it all, our little weather-beaten flotilla ran up the first American flag that had been seen in the port of Präven.

THE port of Präven is securely sheltered by its monster hills. But they can not be said to smile a welcome upon the navigator.

Summer comes slowly upon Präven. When we arrived, the slopes of the hills were heavily patched with snow, and the surface, where it showed itself, was frozen dry. The water-line was toothed with fangs of broken ice, which scraped against the beach

as the tides rose and fell; and an iceberg somehow or other had found its way into the little port. It was a harmless lump, too deep sunk to float into dangerous nearness; and its spire rose pleasantly, like a village church.

“*July 3.* I am writing in the ‘Hosky’ House of Cristiansen. Cristiansen is the Danish governor of Pröven, and this house of Cristiansen is *the House* of Pröven. Its owner is a simple and shrewd old Dane, hale and vigorous, thirty-one of whose sixty-four winters have been spent within the Arctic circle, north of 70° N. Lord in his lonely region—his four sons and five subordinates, oilmen, the only white faces about him, except when he visits Uppernavik—the good old man has the satisfaction of knowing no superior. His habits are three fourths Esquimaux, one eighth Danish, and the remainder Prövenish, or peculiarly his own. His wife is a half-breed, and his family, in language and aspect, completely Esquimaux.

“When the long, dark winter comes, he exchanges books with his friend the priest of Uppernavik. ‘The Dantz Penning Magazin,’ and ‘The History of the Unitas Fratrum,’ take the place of certain well-thumbed, ancient, sentimental novels; and sometimes the priest comes in person to tenant the ‘spare room,’ which makes it very pleasant, ‘for we talk Danish.’

“Except this spare room, which elsewhere would be called the loft of the house, its only apartment is the one in which I am. And here eat, and drink, and cook, and sleep, and live, not only Cristiansen and all his descendants, but his wife’s mother, and her children, grandchildren, and great-grandchildren who are growing up about her. It is fifteen feet broad by sixteen long, with just height enough for a grenadier,

without his cap, to stand erect, and not touch the beams. The frame of the house is of Norway pine, coated with tar, with its interspaces caulked with moss, and small window-panes inserted in a deep casing of wood.

“The most striking decorative feature is a ledge or shelf of pine plank, of varying width, which runs round three of its sides. Its capacity is wonderful. It is the sofa and bed, on which the entire united family find room to loll and sleep; and upon it now are huddled, besides a navy doctor and his writing board, one ink-bottle, sundry articles of food and refreshment, one sleeping child, one lot of babies not in the least asleep, one canary-bird cage with its exotic and most sorrowful little prisoner, and an infinite variety of other articles too tedious to mention, comprising seal-skins, boots, bottles, jumpers, glasses, crockery both of kitchen and nursery, coffee-pots, dog-skin socks, canvas pillows, an eider-down comforter, and a sick hitch with a youthful family of whining puppies.

“Una, the second daughter, has been sick and under treatment; and she is now hard at work with her sisters, Anna, Sara, and Cristina, on a tribute of gratitude to her doctor. They have been busy all the morning whipping and stitching the seal-skins with reindeer tendon thread. My present is to be a complete suit of ladies' apparel, made of the richest seal-skin, according to the standard mode of Pröven, which may always be presumed to be the ‘latest winter fashion.’ It is a really elegant dress. To some the unmentionables might savor of masculinity; but having seen something of a more polite society, my feminine associations are not restricted to petticoats. Extremes meet in the Esquimaux of Greenland and Amazons of Paris.

and stalwart fellows, practiced in the kayack, and the sledge, and the whale-net, adroit with the harpoon and expert with the rifle, are constant at the chase, and bring home their spoil, with the honest pride becoming good providers of their household. And the women, in their nursing, cooking, tailoring, and housekeeping, are, I suppose, faithful enough. But what favorable impression that the mind gets through other channels can contend against the information of the nose! Organ of the aristocracy, critic and *magister morum* of all civilization, censor that heeds neither argument nor remonstrance—the nose, alas! it bids me record, that to all their possible godliness cleanliness is not super-added.

“During the short summer of daylight—it is one of the many apparent vestiges, among this people, of ancient nomadic habits—the whole family gather joy-

ously in the summer's lodge, a tent of seal or reindeer skin, pitched out of doors. Then the room has its annual ventilation, and its cooking and chamber furniture are less liable to be confounded. For the winter the arrangement is this: on three sides of the room, close by the ledge I have spoken of, stand as many large pans of porous steatite or serpentine, elevated on slight wooden tripods. These, filled with seal-blubber, and garnished with moss round the edge to serve as a wick, unite the functions of chandelier and stove. They who quarrel with an ill-trimmed lamp at home should be disciplined by one of them. Each boils its half-gallon kettle of coffee in twenty minutes, and smokes—like a small chimney on fire; and the three burn together. There is no flue, or fire-place, or opening of escape.

“On the remaining side of the room stand a valued table and three chairs; and with these, like a buhl cabinet or fancy *étagère*, conspicuous in its modest corner, a tub. It is the steeping-tub for curing skins. Its contents require active fermentation to fit them for their office; and, to judge from the odor, the process had been going on successfully.”

We warped out to sea again on the afternoon of the third, with our friend the cooper for pilot; the entire settlement turning out upon the rocks to wish us good-by, and remaining there till they looked in the distance like a herd of seal. But we found no opening in the pack, and came back again to Präven on the fourth, not sorry, as the weather was thickening, to pass our festival inside the little port.

Our celebration was of the primitive order. We saluted the town with one of the largest balanced stones, which we rolled down from the cliff above;

and made an egg-nogg of eider eggs; and the men had a Hosky ball; and, in a word, we all did our best to make the day differ from other days—which attempt failed. Still, God ever bless the fourth!

The sixth was Sunday, and we attended church in the morning at the schoolmaster's. The service consisted of a long-winded hymn, and a longer winded sermon, in the Esquimaux—surely the longest of long-winded languages. The congregation were some two dozen men and women, not counting our party.

We put to sea in the afternoon. The weather was soft and warm on shore; but outside it was perfectly delightful: no wind—the streams of ice beyond enforcing a most perfect calm upon the water; the thermometer in the sunshine frequently as high as 76° , and never sinking below 30° in the shade. I basked on deck all night, sleeping in the sun.

And such a night! I saw the moon at midnight, while the sun was slanting along the tinted horizon, and duplicated by reflection from the water below it: the dark bergs to seaward had outlines of silver; and two wild cataracts on the shore-side were falling from ice-backed cliffs twelve hundred feet into the sea.

July 7. I was awakened from my dreamy sleep to receive the visits of a couple of boats that were working slowly to us through the floes. An English face—two English faces—twelve English faces: what a happy sight! We had had no one but ourselves to speak our own tongue to for three hundred days, and were as glad to listen to it as if we had been serving out the time in the penitentiary of silence at Auburn or Sing-Sing. Their broad North Briton was music. It was not the offensive dialect of the provincial Englishman, with the affectation of speaking his language correctly; but a strong and manly home-brew of the best language in the world for words of sincere and hearty good-will. They had to turn up their noses at our seal's-liver breakfast; but, when they heard of our winter trials, they stuffed down the seal without tasting it. I felt sorry after they were off, that I had not taken their names down every one.

The whaling vessels to which they returned were in the freer water outside the shore stream, the *Jane O'Boness*, Captain John Walker, and the *Pacific*, Captain Patterson.

THE next day, beating hard to windward, we made Uppernavik again. The scenery around it was very striking, exhibiting some magnificent mural sections of gneiss and slates. The entering headland was some fifteen hundred feet high. We found all the hills patched with snow to the water's edge, where their bases are abraded by the moving floes from one year's end to another.

Mr. Murdaugh and myself visited the town; that is to say, the priest's house, the governor's house, the oil house, the school-church house, and sundry native huts. The wood-cut at the bottom of page 499 gives

the interior of one of them, in which we superintended the manufacture of a dish of coffee.

We were received by the governor, accompanied by an old friend of ours from Präven, a sort of secretary there, "plenty-scribe-'em" as he styled himself. The old gentleman had arrived at two that morning, in a whale-boat, with his stalwart sons, after thirty-two miles of pulling through the ice against the wind. "Keesey ver bod," he said; "the ice was very bad."

The governor, superior in tone to Cristiansen, who is a self-made man, welcomed us with fine Danish good-breeding, and there is no good-breeding better. We found him out to be a desperate conservative, fearful of nothing but change. His house was after the fashion of Mr. Moldrop's, of Godhaven, and scrupulously clean. Coffee was served; and we had the honor of being introduced to three young ladies of the half-breed, absolutely with frocks on. I thought I could see that one of them had pantalettes of seal-skin peeping out from under her skirt, and a wiser critic than myself might have said that all their dresses were somewhat antique of fashion. But they met us, on the other hand, with a lady-like disregard of our own outlandish costume; and though our language was somewhat composite in its idiom, for I understand neither the Danish nor the Hosky, and they understood very little English, we managed to keep up quite an animated conversation. It was very pleasant to relapse in their company for a while, into the manners of society at home.

We saw also the family of Petersen, Penny's dog and Esquimaux manager, all neat and pleasing persons; the sons, frank, manly fellows, and the eldest daughter really quite refined and pretty. But we did

not remain long. Our Aberdeen friends had transferred to us a full supply of newspapers which they had brought for Penny: so, after prescribing for the governor's child, and receiving a dog-skin jumper for my fee, we returned on board to review the annals of the outer world for the past year.

We now pursued our way very smoothly. We had delightful weather; not the best, indeed, for men whose errand lay ahead, but still very welcome to those who had roughed it of late so severely. Summer was concentrating all its strength and beauty in the long, sun-encircled day.

Both our vessels were carrying home Esquimaux dogs. By continued kindness and over-feeding, I succeeded in quite changing the nature of ours: both Disco and Hosky were on the high road to civilization. But those on board the Rescue and the Albert were still as wild as jackals: let loose upon the ice, it was almost impossible to catch them again. One afternoon, a little below the Devil's Thumb, when the dogs of the Albert were out on the floe for exercise, a sudden breeze allowed her to work to windward through an open lead. One poor dog was left behind. Boats were sent out to recover him, and we all tried by voice and gesture to coax him toward us. But the half savage, though he stood gazing at us wildly when we were at a distance, ran skulking and wolf-like as soon as we were near. We were forced at last to abandon him to his fate. We could see him for hours, a dark speck upon the white floe; and afterward, as far off as the spy-glass served, still with his head raised and his body thrown back on his haunches. Worse than this; such was the quiet expanse of ice and water, that we heard the poor creature's howling, waxing

GOOD-BY TO THE PRINCE ALBERT, MELVILLE BAY.

fainter and fainter, for eight hours after we left the ice.

The training of these animals by the natives is of the most ungracious sort. I never heard a kind accent from an Esquimaux to his dog. The driver's whip of walrus hide, some twenty feet long, a stone or a lump of ice skillfully directed, an imprecation loud and sharp, made emphatic by the fist or foot, and a grudged ration of seal's meat, make up the winter's entertainment of an Esquimaux team. In the summer the dogs run at large and cater for themselves.

I remarked that there were comparatively few of them at Holsteinberg, and was told a melancholy story to account for it. It seems that the governor, and priest, and fisherman keep goats, veritable goats, housed in a fire-warmed apartment in winter, and allowed the rest of the year to crop the grasses of the snow valleys. Now the half-tutored, unfed Esquimaux dog would eat a goat, bones, skin, and, for aught I know, horns. The diet was too expensive. It became a grave question, therefore, how to reconcile the incompatibilities of dog and goat. The matter was settled very summarily. When the green season of sunshine and plenty came, the dogs were sent to a rocky islet, a sort of St. Helena establishment, about a mile from the main, with permission to live by their wits; and the goats remained to browse and grow fat at large. The results were tragical. The dogs were afflicted with sore famine. Great life battles began; the strong keeping themselves alive by eating the weak. By this terrible process of gradual reduction, the colony was resolved into some four or five scarred veterans, whose nightly combats disturbed even the milk drinkers at the settlement.

A few days after the scene I have described, we neared our hated landmark of last season, the Devil's Thumb. But here the leads closed ; and our labyrinth of bergs attended us still, clogging our way, and wearying us with their monotony. Our commander had but one thought, and we all sympathized in it—how could our little squadron regain its position at the searching grounds? We had otherwise no lack of incidents. There were parhelia, intricate ones, with six solar images and eccentric circles of light, one of which had its circumference passing through the sun. And we had bear hunts now and then of mothers and cubs together ; and sometimes we shot at a flock of birds.

But the spirit of the hunt had left us. We were close upon the middle of August. Less than four weeks remained for us to get rid of this vexatious entanglement, press on through Lancaster Sound, complete our explorations in Wellington Channel, and return to the open water of the bay. It was before the middle of September that we had been frozen in last year. And here we were in a perfect ice-trap, unable to win an inch of progress.

We were without the *Albert* too. As long ago as the fifth, her good folks had determined to make south, despairing of success in a northward effort ; and on the eleventh, while we were yet attached to the old land-floe, she found her way to an open lead, and disappeared on the thirteenth. We could hardly talk of the regrets we all felt at losing them. It seemed to me that for days after I could hear their broken-hearted little hand-organ grinding "The Garb of Old Gael."

We perhaps thought of their departure the more, because it implied something of uncertainty as to our own fate. They had avowedly left us, fearless and enterprising as they were, to escape from hazards that we were continuing to brave. Mr. Leask, their veteran ice-master, thought, when he left us, that if we followed the northern leads there was almost a certainty of our being caught, like the *Swan*, and the *York*, and a host of others before us. A pleasant neighborhood, truly! Here perished the ships of '47. Here the *North Star* was beset in '48; hereabout, the year before last, the *Lady Jane*, and the *Superior*, and the *Prince of Wales*; and, coming to our own experience of last year, here it was, in this very devil's hole, that we wore out our three weeks' imprisonment.

Moreover, the season was more advanced than last year's had been. The thermometer, which stood at noon in the shade at 54° , sunk in the evening hours to 30° .

"*August* 17, Sunday. The same revolving wall of bergs meets us to the west, but the glacier on the other side is partially hidden by a new procession inshore. While profaning the day by an attempt to sketch these sublime monuments of creative power in my drawing-book, I was interrupted by a heavy undulation, rolling under the brig, and passing on to the solid inshore floe. It was followed by a number of others, coming in quick succession, and breaking up the floe drift in every direction. The action continued for some minutes. It must have been caused by some very large and probably irregular berg overturning at a distance; but it was without noise, and indeed without premonition of any sort. The direction of the wave where it struck us was from the northwest. Up to this mo-

ment, all the heavy heaving and warping of to-day had been without any effect. Now the floes separated as if by magic: there was relaxation every where; and we made at least two hundred yards before the ice closed again.

“This afternoon, the captain, with Murdaugh and myself, walked and climbed over this same ice, to make a reconnoissance of the region beyond the bergs. By the aid of boat-hooks and some slippery jumping we achieved it, and were at last able to climb one of the imprisoning bergs, and look from its crest to the other side.

“It was a sermon such as uninspired man has never preached. There, there, far down below us, there was the open water, stretching wide away to the south; placid and bright, bearing on its glazed surface fleets of bergs and rafts of floes, but open water still; and yet further on, the unbroken water-sky. Our little brig was under us, the tiny fretwork of her spars traced clean and sharp against the arena of ice; but, thank God! she is nearing the gates of her prison-house. De Haven was right. One quarter of a mile! Now, lads, for the warps again!

“*Midnight.* We are out: at ten minutes past eleven we shipped our rudder, the first time in three weeks; and made sail, the first time since the 26th of July.

“We owe it all to a relaxation of the floes. The wind was from the northward: the bergs that hemmed in the loose drift around us yielded a little toward the west, and the skreed began to separate. The main-brace was spliced; springs took the place of warps; and the men went gallantly to their work. They were as anxious to get out as any of us.

“At last we reached an opening: two immense

bergs, overhanging and ragged ; and down toward the water-line, an opening between them like a gateway. Shall we pass ? We have seen so many disruptions, and capsizings, and accidents of all sorts in this work of anchor-planting : sometimes a mere breath brings down masses that would bury half a dozen such vessels as ours ; and these bergs are so water-washed and pendulous. Murdaugh waited for the order. De Haven gave it ; and, in deep silence, we passed the Gades of the Devil's Trap.

"*August* 19, Tuesday. The Rescue is close astern of us : she got through about noon yesterday. Our commodore has resolved on an immediate return to the United States."

The game had been played out fairly. Lancaster Sound was out of the question ; and for our scurvy-riddled crew, a nine months' winter in the ice of North Baffin would have been disastrous.

AFTER our escape from the congregated bergs, we sailed to one at a little distance, and filled our water-casks. The berg crumbled and fell while we were doing so, but nobody was hurt ; and in two days more, after a closing skirmish with the ice-pack, we headed homeward. On the twentieth we made our last salutation to the Devil's Thumb ; and on the twenty-third, in the evening, we were near enough to Upernavik for a little boating party of us to make it a visit.

With the exception of Kangiartsoak, this is the most northern of the Danish settlements. Its latitude is $72^{\circ} 47'$, three hundred and seventy miles within the Arctic circle. But reaching it, we felt as if we had renewed our communication with the world ; for here, once in every year, comes the solitary trader from Copenhagen. We had become so familiar with the dreariness of Greenland, that the glaring red gables of the

three houses, and the white curiosity, which stood for a steeple above the church, were absolutely cheering; and we landed, poor souls! after our twelve miles' row, with hearts as elate as ever frolicked among the orange-groves of Brazil or the cocoa-palms of the Eastern Pacific.

Disappointment once more! The governor had gone to Präven; the Danish ship had gone to Präven; the priest had gone to Präven. But the gentler sex remained. The governor's lady gave us a kindly welcome, and extended to us all the hospitalities of his mansion.

The mansion was far from picturesque. It was a square block of heavy timber, running into a high-peak gable. The roof was of tarred canvas, laid over boards; the wooden walls coated

with tar, and painted a glowing red. A little paling, white and garden-like, inclosed about ten feet of prepared soil, covered with heavy glass frames; under which, in spite of the hoar-frost that gathered on them, we could detect a few bunches of crucifers, green radishes, and turnip-tops. It was *the* garden, the distinctive appendage of the governor's residence.

Inside the house—it is the type of those at Disco and Präven—you pass by a narrow-boarded vestibule to a parlor. This parlor, a room of dignified consideration, is twelve feet long by eleven: beyond it, a door opens to display the suite, a second room, the state chamber, of the same size.

The most striking article of furniture is the stove, a

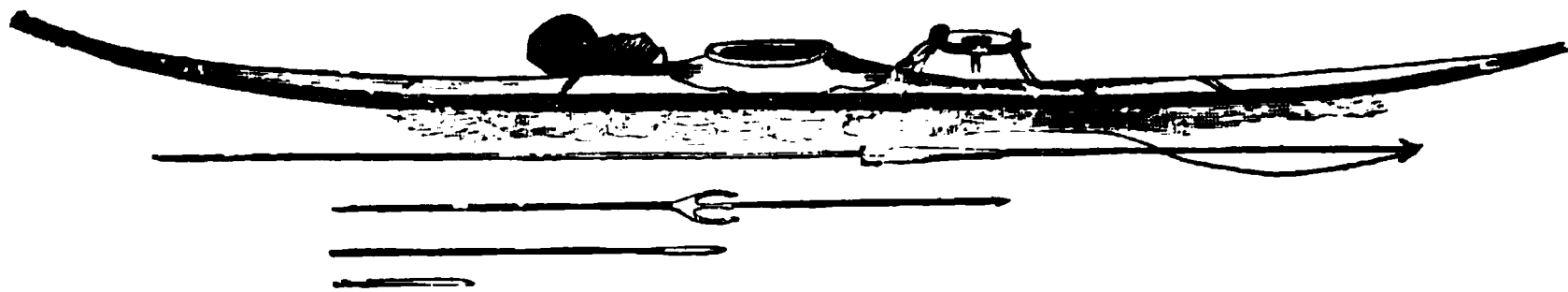
tall, black cylinder, such as I have seen in the Baltic cities, standing like a column in the corner: the next, a platoon of tobacco-pipes paraded against the wall: the next—let me be honest, it was the first—a table, with a clean white cloth, and plates, knives, and forks, all equally clean. Overhead hang beams as heavy as the carlines of a ship's cabin: below is an uncovered floor of scrupulous polish: the windows are recessed, glazed in small squares, and opening, door-like, behind muslin curtains: the walls canvas, painted, and decorated with a few prints altogether remarkable for intensity of color. The looking-glass; I reserve it for more special mention. It was not very large, but it was the first we had encountered since we came into the regions of ice. "To see ourselves as others see us" is not always the prayer of an intelligent self-love. Sharp-visaged, staring, weather-beaten old men, wrinkle-marked, tawny-bearded, haggard-looking: the boys of Uppernavik are better bred than the New Yorkers, or they would have mobbed us.

The ladies—they were ladies, they knew no superiors; they were self-possessed, hospitable; they wore frocks, and they did not laugh at us—the ladies spread the meal, coffee, loons' eggs, brown bread, and a welcome. We ate like jail-birds. At last came the crowning act of hospitality; on the bottom of a blue saucer, radiating like the spokes of a wheel or the sticks of a Delaware's camp-fire, crisp, pale, yet blushing at their tips, and crowned each with its little verdant tuft—*ten radishes!* Talk of the mango of Luzon and the mangostine of Borneo, the cherimoya of Peru, the pine of Sumatra, the seckel-pear of Schuylkill meadows; but the palate must cease to have a memory before I yield a place to any of them alongside the ten radishes of Uppernavik.

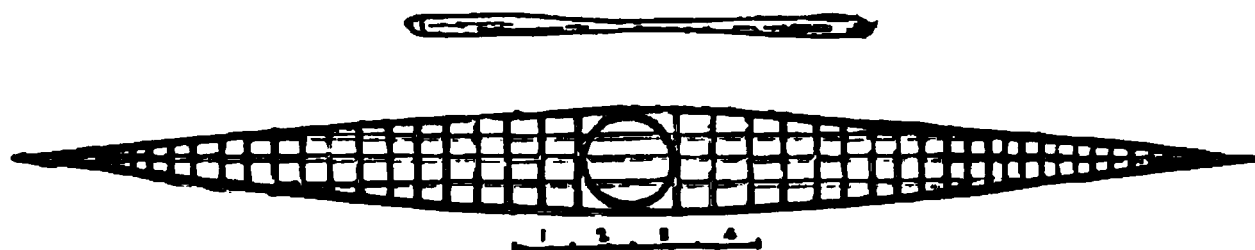
On the twenty-fifth we reached the Whale-fish Islands, and at six in the evening were near enough to be towed in by our boats and anchor off Kronprinsen. Flocks of kayacks hung about our vessel, like birds about a floating spar. We thought them more sprightly and active than the Esquimaux we had been among; but perhaps it is as unfair to judge of the Esquimaux without his kayack as of a sloth off his tree. There was a bright boy among them, under ten years of age, who could manage a little craft they had built for him admirably.

The common length of the kayack is about eighteen feet, its breadth on deck some twenty-one inches, and its depth ten inches in the middle, just such as to allow its occupant to sit with his feet extended on the bottom and his hips below the deck.

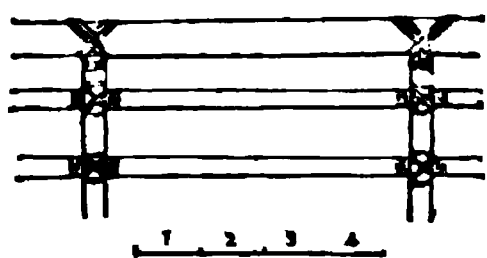
Its frame is light enough to startle all our notions of naval construction, and it is covered with nothing but tanned seal-hide. Yet in this egg-shell fabric the Esquimaux navigator habitually, and fearlessly, and successfully too, encounters risks which his more civilized rivals in the seal-hunt, the men of New Bedford



and Stonington, would rightfully shrink from. I am not sure that I can make such a description of its proportions and structure as a ship-builder would understand; but the drawings I annex have been made carefully from one of the best models, and may be relied on for all the information that can be gathered from them.



The skeleton consists of three longitudinal strips of wood on each side—it would be wrong to call them timbers, for they are rarely thicker than a common plastering lath — stretching from end to end, and shielded at the stem and stern by cutwaters of bone. The upper of these, the gunwale, if I may call it so, is



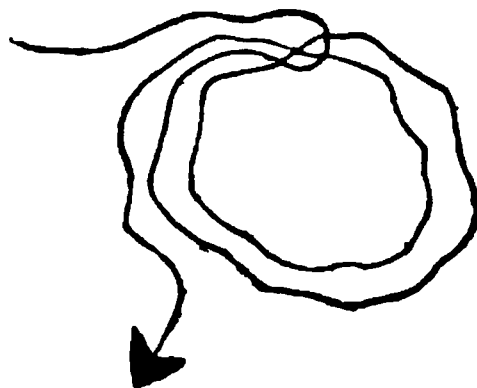
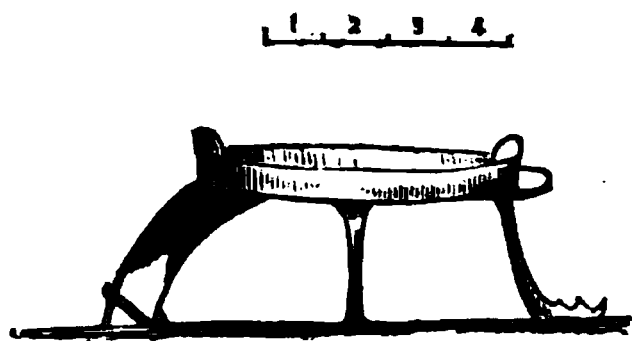
somewhat stouter than the others.

The bottom is framed by three similar longitudinal strips. These are crossed by other strips or hoops,

which perform the office of knees and ribs: they are placed at a distance of not more than eight to ten inches from one another. Wherever the parts of this frame-work meet or cross, they are bound together with reindeer tendon very artistically. The general outline is, I think, given accurately in the sketch on the opposite page.

Over this little basket-work of wood is stretched the coating of seal hides, which also covers the deck, very neatly sewed with tendon, and firmly glued at the edges by a composition of reindeer horn scraped and liquefied in oil. A varnish made of the same materials is used to protect the whole exterior.

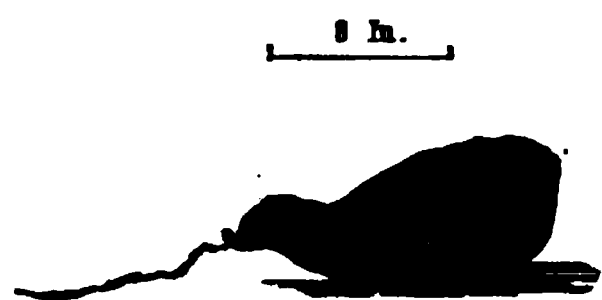
The *pah*, or man-hole, as we would term it, is very



nearly in the centre of the little vessel, sometimes a few inches toward the stern. It is circular or nearly so, wide enough to let the kayacker squeeze his hips through it, and no more. It has a rim or lip, secured upon the gunwale, and rising a couple of inches above the deck, so as to permit the navigator to bind it water-tight around his person. Immediately in front of him is his *as-say-leut*, or line stand, surmounted by a reel, with the sealing-line snugly coiled about it, and revolving on its centre with the slightest touch. He has his harpoon and his lances strapped at his side; his rifle, if he owns one, stowed away securely between decks.

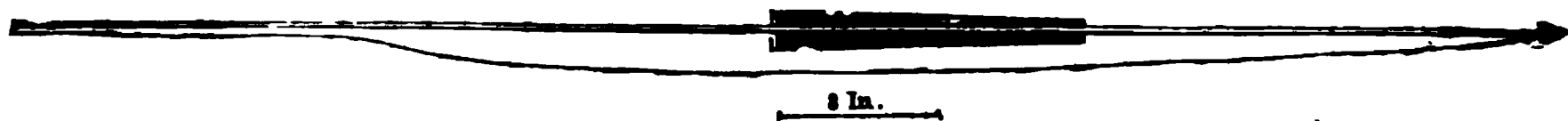
Just behind the kayacker rests his bladder-float or air-bag, an air-tight sack of seal-skin, always kept inflated, and fastened to the sealing-line. It performs the double office of a buoy, and a break or drag to retard the motion of the prey after it is struck.

The harpoon, or principal lance (*unahk*), is also at-



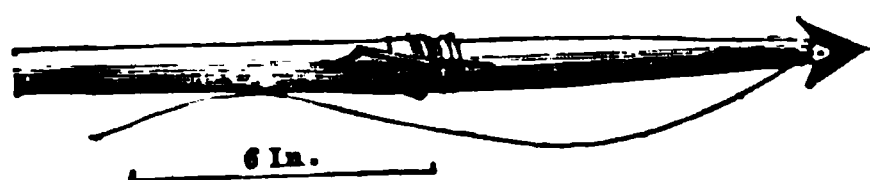
8 in.

air-bag, an air-tight sack of seal-skin, always kept inflated, and fastened to the sealing-line. It performs the double office of a buoy, and a break



8 in.

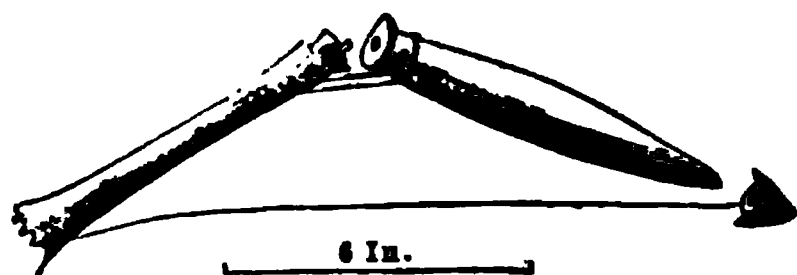
tached to the sealing-line. It is a most ingenious device. The rod or staff is divided at right angles in



6 in.

two pieces, which are neatly jointed or hinged with tendon strips, but so braced by the manner in which the tendon is made to cross and bind in the lashing, that, except when the two parts are severed by lateral pressure, they form but a single shaft. The point, gener-

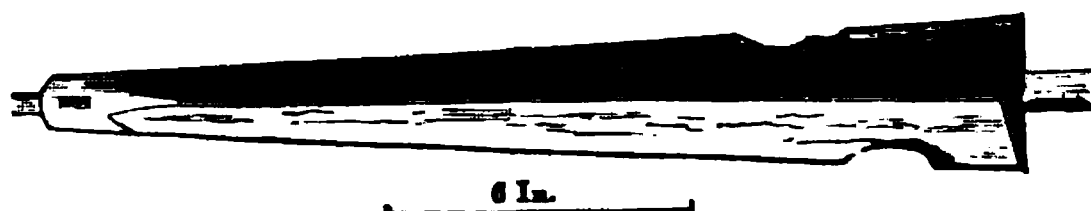
ally, they form but a single shaft. The point, gener-



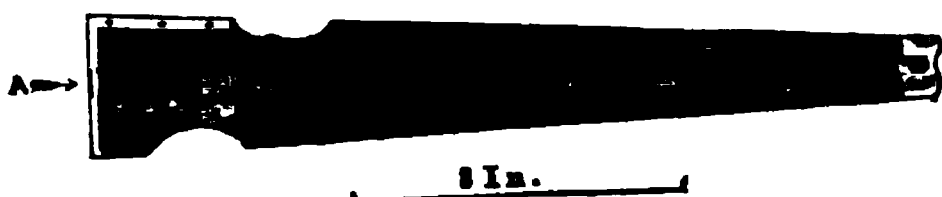
ally an arrow-head of bone, has a socket to receive the end of the shaft: it disengages itself readily from its

place, but still remains fast to the end of the line. Thus, when the kayacker has struck his prey, the shaft escapes the risk of breaking from a pull against the grain by bending at the joint, and the point is carried free by the animal as he dives.

At the right centre of gravity of the harpoon, that point, I mean, at which a cudgel-player would grasp his staff, a neatly-arranged *cestus* or holder (*noon-sok*)



OUTSIDE OR BACK OF THE NOON-SOK.



INSIDE OR SECTION OF THE NOON-SOK.

fits itself on the shaft. It serves to give the kayacker a good grip when casting his weapon, but slides off from it, and is left in the hand, at the moment of drawing back his arm. The bird javelin (*neu-ve-ak*),

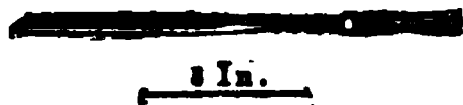
8 In.



the seal lance (*ah-gnu-ve-to*), and the rude hunting-knife



(*ka-poot*), will be easily understood from my sketches.



The paddle (*pa-uh-teet*), about which a knowing Esquimaux will waste as many words as a sporting gentleman upon a double-barreled Manton or a bridle-bit of peculiar fancy, is in every respect a beautifully considered instrument. It never exceeds seven feet in length. It is double-bladed, and its central portion, which receives the hands, presents an ellipsoid face, well adapted to a secure grasp. The blades are four inches in width, and some two feet in length, forming very nearly sections of a cone. Their edges and tips are carefully guarded from the cutting action of the ice by the ivory of the walrus or narwhal.

Thus constructed and furnished, its seal-skin covering renewed every year, the kayack is the life, and pastime, and pride of its owner. He carries it on his shoulder into the surf, clad in his water-proof seal-skin dress, belted close round the neck, his hood firmly set above; wedges himself into the man-hole, unites himself by a lashing to its rim, and paddles off for a frolic outside the breakers, or it may be a seal-hunt, or to throw his javelin at the eider, or perhaps to carry dispatches to some distant settlement, or to take part in a crusade against the reindeer.

In their long excursions in search of deer, the kayackers paddle their way to the nearest portage along the coast, and shoulder their little skiff till they reach the interior lakes. Their dexterity is admirable in the use of their weapons. I have seen them spear the eider on the wing and the loon as he was diving. Scudding along at a rate equal to that of a five-oared whaleboat, they fling their tiny javelin far ahead, and, without interrupting their progress, seize it as they pass.

The authorities of Greenland communicate constantly with their different posts by means of the ka-

yack. On these occasions the express consists of two, traveling together for assistance and fellowship. They are expeditious, and proverbially reliable. They travel only during the day. At night they land upon some well-remembered solitude; the kayack is carried up, and laid beside the leeward face of some protecting rock, and, after a scanty meal, the Hosky seats himself once more in its closely-fitting hole; then, drawing over him his water-tight hood, he leans for support against the naked stone, and sleeps. One of these messengers arrived at Holsteinberg while we were there from Fredericshaab, three hundred and sixty miles in ten days; traveling along a tempestuous coast, with varying winds and currents, at a mean rate of thirty-six miles a day.

It is said the expertness of the kayacker increases as you proceed south. If the natives of Julianshaab and Lichtenfels surpass those of Egedesminde and Holsteinberg, their feats are unnecessarily wonderful. Here are some of them, not performed as such, but illustrating the accomplishments of a well-trained man.

Extending out from an offsetting mountain-ridge to the north of Holsteinberg, is a rocky reef or ledge, over which the sea breaks heavily, and the currents run with perplexing caprice and force. In almost all sorts of weather, if there be only light enough to see, the kayacks may be met playing about these surf-beaten passages, regardless of wind, swell, or tides. When our vessel was entering port, we were boarded by a kayack pilot. In spite of the heavy seaway, he approached fearlessly to the side of the brig, then, poising himself on the slope of the waves, he avoided the trough, and, passing a running bowline fore and aft

over his little craft, man and boat were lifted bodily on board.

Going out to seaward, with a heavy inshore surf rolling, is no trifle, even to well-manned whale-boats. The kayacker paddles quietly out toward the breakers. The roaring lip of green water bends roof-like over him. Down cowers the pliant man, his right shoulder buried in the water, and his hooded head bowed upon his breast. An instant and he emerges on the outer side with a jutting impulse, shaking the water from his mane, and preparing for a fresh encounter.

The somerset, the "cantrum," as the whalers term it, may be seen any hour of the day for a plug of tobacco or a glass of rum. I have seen it with different degrees of address; but one, that Mr. Müller, the governor of Holsteinberg, told me of, is the perfection of dextrous overturning. The kayacker takes a stone, as large as he can grasp in his hand, holding the paddle by the imperfect grip of the thumbs. He whirls his hands over his head, upsets his little bark, buries it bottom up, and rights himself on the other side, still holding the stone.

But after all, the crowning feat is the every-day one of catching the seal. For this the kayak is constructed, and it is here that its wonderful adaptation of purpose is best displayed. Without describing the admirable astuteness with which he finds and approaches his prey, let us suppose the kayacker close upon a seal. The line-stand is carefully examined, the coil adjusted, the attachments to the body of the boat so fixed that the slightest strain will separate them. The bladder-float is disengaged, and the harpoon tipped with its barb, which forms the extremity of the coil.

In an instant the kayacker has thrown his body back and sent his weapon home. Whirr! goes the little coil, and the float is bobbing over the water—not far, however, for the barb has entered the lungs, and the seal must rise for breath. Now the harpoon is picked up, its head remaining in the victim; and the kayack comes along. Here is required discretion as well as address. The hunter has probably but two weapons, a lance and a knife. The latter he can not part with, and even the lance brings him to closer quarters than the safety of his craft would invite; for the contortions of a large seal thus wounded may tear it at some of the seams, and the merest crevice is certain destruction. If he has with him the light javelin which he uses for spearing birds, he may be tempted to employ it now; but this, I believe, is not altogether sportsmanlike.

This occasional tendency of the ice-raft to float across the bay has given rise to some fearful accidents. It would be difficult for fiction to exceed some of the stories that are well authenticated of these poor nomads.

Esquimaux who have gone out with kayack or sledge have been mourned as dead. Years afterward messages have come by the whalers of their safety in the unknown regions of the West, and of their adoption there; but after trials too fearful to be recounted. Some years ago—the year was mentioned, but I have forgot it—a couple of Esquimaux, relatives, set out on a sledge in quest of seal. The great ice-plain formed one continuous sheet from the Greenland shore as far as the eye could reach. During the night, one of them, awaking from a heavy sleep, found that the wind had shifted to the eastward. It was blowing gently.

and could hardly have been blowing long. They harnessed in their dogs, urged them to their utmost speed, and made for the land they had left. Too late! a yawning chasm of open water lay already between. A day was lost in frantic despair. It blew a gale, an offshore southeaster. The fog rose, the wind still from the east: the shore was gone.

The story is a wild one. They reharnessed the dogs, and turned to the west, one hundred and thirty trackless miles of ice before them. On the third day the dogs gave out: one of the lost men killed his fellow, and revived the animals with his flesh. The wretched survivor at last reached the North American shore about Merchant's Bay. Years afterward, this account came over by a circuitous channel to the Greenland settlement. He had married a new wife, had a new family, a new home, a new country, from which, had he desired it never so much, there could be for him no return.

The traditions of all the settlements have tales of similar disaster. Yet the Esquimaux are a happy race of people, happy so far as content and an elastic temperament go to make up happiness.

We left the settlements of Baffin's Bay on the 6th of September, 1851, grateful exceedingly to the kind-hearted officers of the Danish posts; and after a run of some twenty-four days, unmarked by incident, touched our native soil again at New York. Our noble friend, Henry Grinnell, was the first to welcome us on the pier-head.

CHAPTER XXXIV.

DR. KANE'S SECOND EXPEDITION.

In the month of December, 1852, Dr. Kane received special orders from the Secretary of the Navy, "to conduct an expedition to the Arctic seas, in search of Sir John Franklin."

This Second Expedition, in the brig "Advance," left New York on the 30th day of May, 1853, escorted by several steamers; and, passing slowly on to the Narrows amid salutes and cheers of farewell, cast off from the steam-tug and put to sea.

The party, all told, consisted of eighteen persons:

Elisha Kent Kane, Commander. Henry Brooks, First Officer.

Isaac I. Hayes, Surgeon. August Sontag, Astronomer.

William Morton, James McGary, John W. Wilson, Amos Bonsall, George Riley, George Stephenson, Christian Ohlsen, George Whipple, William Godfrey, Henry Goodfellow, John Blake, Jefferson Baker, Peter Schubert, Thomas Hickey.

The history of this Expedition was published after the return of its surviving members, and at once took rank as the most interesting and most fascinating work in the catalogue of Arctic literature—an eminence which it to-day enjoys. Although Dr. Kane stands in the front rank of Arctic adventurers, his equally eminent success as an author is unquestioned. The following extracts from "Arctic Explorations" can only serve to give the outlines of the expedition, and a few of the experiences of the party:

"We entered the harbor of Fiskernaes on the 1st of July, amid the clamor of its entire population, assembled on the rocks to greet us. This place has an enviable reputation for climate and health. Except perhaps Holsteinberg, it is the driest station upon the coast; and the springs which well through the mosses, frequently remain unfrozen throughout the year.

"We found Mr. Lassen, the superintending official of the Danish Company, a hearty, single-minded man, fond of his wife, his children, and his pipe. The visit of our brig was, of course, an incident to be marked in the simple annals of his colony; and, even before I had shown him my official letters, from the Court of Denmark, he had most hospitably proffered everything for our accommodation.

"Feeling that our dogs would require fresh provisions, which could hardly be spared from our supplies on shipboard, I availed myself of Mr. Lassen's influence to obtain an Esquimaux hunter for our party. He recommended to me one Hans Christian, a boy of nineteen, as an expert with the kayak and javelin; and after Hans had given me a touch of his quality by spearing a bird on the wing, I engaged him. He was fat, good-natured, and, except under the excitements of the hunt, as stolid and unimpressible as one of our own Indians.

"Bidding good-bye to the governor, whose hospitality we had shared liberally, we put to sea on Saturday, the 10th, beating to the northward and westward in the teeth of a heavy gale.

"On the 16th we passed the promontory of Swartehuk, and were welcomed the next day at Proven by my old friend Christiansen, the superintendent, and found his family much as I left them three years

FASTENED TO AN ICEBERG.

PARTING HAWKINS OFF GOODSEND LEDGE.

before. Frederick, his son, had married a native woman, and added a summer tent, a half-breed boy, and a Danish rifle to his stock of valuables. My former patient, Anna, had united fortunes with a fat-faced Esquimaux, and was the mother of a chubby little girl. Madame Christiansen, who counted all these and so many others as her happy progeny, was hearty and warm-hearted as ever.

“August 1. Beset thoroughly with drifting ice, small rotten floe-pieces. But for our berg, we would now be carried to the south ; as it is, we drift with it, to the north and east.

“2 A. M. The continued pressure against our berg has begun to affect it ; and, like the great floe all around us, it has taken up its line of march toward the south. At the risk of being entangled, I ordered a light line to be carried out to a much larger berg, and, after four hours' labor, made fast to it securely. This berg is a moving breakwater, and of gigantic proportions : it keeps its course steadily toward the north, while the loose ice drifts by on each side, leaving a wake of black water for a mile behind us.

“About 10 P. M. the immediate danger was past ; and, espying a lead to the northeast, we got under weigh, and pushed over in spite of the drifting trash. The men worked with a will, and we bored through the floes in excellent style.

“On our road we were favored with a gorgeous spectacle, which hardly any excitement of peril could have made us overlook. The midnight sun came out over the northern crest of the great berg, our late “fast friend,” kindling variously-colored fires on every part of its surface, and making the ice around us one great resplendency of gemwork, blazing carbuncles, and rubies and molten gold.

"August 6. Cape Alexander and Cape Isabella, the headlands of Smith's Sound, are now in sight; on the right we have an array of cliffs, whose frowning grandeur might dignify the entrance to the proudest of southern seas. I should say they would average from four to five hundred yards in height, with some of their precipices eight hundred feet at a single step. They have been until now the Arctic pillars of Hercules; and they look down on us as if they challenged our right to pass. Even the sailors are impressed, as we move under their dark shadow.

"August 20. By Saturday morning it blew a perfect hurricane. We had seen it coming, and were ready with three good hawsers out ahead, and all things snug on board.

"Still it came on heavier and heavier, and the ice began to drive more wildly than I thought I had ever seen it. I had just turned in to warm and dry myself during a momentary lull, and was stretching myself out in my bunk, when I heard the sharp twanging snap of a cord. Our six-inch hawser had parted, and we were swinging by the two others; the gale roaring like a lion to the southward.

"Half a minute more, and 'twang, twang!' came a second report. I knew it was the whale-line by the shrillness of the ring. Our noble ten-inch manilla still held on. I was hurrying my last sock into its seal-skin boot, when McGary came waddling down the companion-ladder:—'Captain Kane, she won't hold much longer: it's blowing the devil himself, and I am afraid to surge.'

"The manilla cable was proving its excellence when I reached the deck; and the crew, as they gathered round me were loud in its praises. We could hear its

deep Eolian chant, swelling through all the rattle of the running-gear and moaning of the shrouds. It was the death-song! The strands gave way, with the noise of a shotted gun; and in the smoke that followed their recoil, we were dragged out by the wild ice, at its mercy.

“But a new enemy came in sight ahead. Directly in our way, just beyond the line of floe-ice against which we were alternately sliding and thumping, was a group of bergs. We had no power to avoid them; and the only question was whether we were to be dashed in pieces against them, or whether they might not offer us some providential nook of refuge from the storm. But, as we neared them; we perceived that they were at some distance from the floe-edge, and separated from it by an interval of open water. Our hopes rose, as the gale drove us toward this passage, and into it; and we were ready to exult, when, from some unexplained cause,—probably an eddy of the wind against the lofty ice-walls,—we lost our headway. Almost at the same moment, we saw that the bergs were not at rest; that with a momentum of their own they were bearing down upon the other ice, and that it must be our fate to be crushed between the two.

“Just then, a broad sconce-piece or low water-washed berg came driving up from the southward. The thought flashed upon me of one of our escapes in Melville Bay; and as the sconce moved rapidly close alongside us, McGary managed to plant an anchor on its slope, and hold on to it by a whale-line. It was an anxious moment. Our noble tow-horse, whiter than the pale horse that seemed to be pursuing us, hauled us bravely on; the spray dashing over his windward flanks, and his forehead ploughing up the lesser ice, as

if in scorn. The bergs encroached upon us as we advanced: our channel narrowed to width of perhaps forty feet: we braced the yards to clear the impending ice-walls.

“We passed clear; but it was a close shave,—so close that our port quarter-boat would have been crushed if we had not taken it in from the davits,—and found ourselves under the lee of a berg, in a comparatively open lead. Never did heart-tired men acknowledge with more gratitude their merciful deliverance from a wretched death.”

After forcing a passage for a week longer, with a constant repetition of the scenes just described, Dr. Kane held a grand council with his officers, and with one exception, Henry Brooks, they were in favor of returning southward to winter. Not being able to take the same view, Dr. Kane announced his intention of working towards the northern headland of the bay: once there, he would put the brig into winter harbor at the first suitable place. In his decision they all cheerfully acquiesced. Finally, on the 7th of September, the “Advance” was anchored in Rensselaer Harbor, and by the 10th, was firmly frozen in. “The same ice is around her still.”

Preparations for the winter's residence at this place were at once commenced; journeys were made towards the interior, and a party of seven men set off September 20th, dragging a sledge load of pemmican, to establish the first of a chain of provision depots along the coast, for the benefit of exploring parties to be sent out the next spring. On the 10th of October, Kane with a dog team, and Blake on skates, started off to look for the absent party, who had not returned when expected.

SYLVIA HEADLAND.--INSPECTING A HARBOR.

RENSSELAER HARBOR.

“On the morning of the 15th, about two hours before the late sunrise, as I was preparing to climb a berg from which I might have a sight of the road ahead, I perceived far off upon the white snow a dark object, which not only moved, but altered its shape strangely,—now expanding into a long black line, now waving, now gathering itself up into a compact mass. It was the returning sledge party. They had seen our black tent of Kedar, and ferried across to seek it.

“They were most welcome; for their absence, in the fearfully open state of the ice, had filled me with apprehensions. We could not distinguish each other, as we drew near in the twilight; and my first good news of them was when I heard that they were singing. On they came, and at last I was able to count their voices, one by one. Thank God, seven! Poor John Blake was so breathless with gratulation, that I could not get him to blow his signal-horn. We gave them, instead, the good old Anglo-Saxon greeting, “three cheers!” and in a few minutes were among them.

“They had camped one night under the lee of some large icebergs, and within hearing of the grand artillery of the glacier. The floe on which their tent was pitched was of recent and transparent ice; and the party, too tired to seek a safer asylum, had turned in to rest; when, with a crack like the snap of a gigantic whip, the ice opened directly beneath them. This was, as nearly as they could estimate the time, at about one o'clock in the morning. The darkness was intense; and the cold, about 10° below zero, was increased by a wind which blew from the northeast over the glacier. They gathered together their tent and

sleeping furs, and lashed them according to the best of their ability, upon the sledge.

“Repeated intonations warned them that the ice was breaking up; a swell, evidently produced from the avalanches from the glacier, caused the platform on which they stood to rock to and fro.

“November 16. Poor Hans has been sorely homesick. Three days ago he bundled up his clothes and took his rifle to bid us all good-bye. It turns out that besides his mother, there is another one of the softer sex at Fiskernaes that the boy's heart is dreaming of. He looked as wretched as any lover of a milder clime. I hope I have treated his nostalgia successfully, by giving him first a dose of salts, and secondly, promotion. He has now all the dignity of henchman. He harnesses my dogs, builds my traps, and walks with me on my ice-tramps; and, except hunting, is excused from all other duty. He is really attached to me, and as happy as a fat man ought to be.

“December 15. We have lost the last vestige of our mid-day twilight. We cannot see print, and hardly paper: the fingers cannot be counted a foot from the eyes. Noonday and midnight are alike, and, except a vague glimmer on the sky that seems to define the hill outline to the south, we have nothing to tell us that this Arctic world of ours has a sun. In one week more we shall reach the midnight of the year.

“December 26. Our anxieties for old Grim might have interfered with almost any thing else; but they could not arrest our celebration of yesterday. Dr. Hayes made us a well-studied oration, and Morton a capital punch; add to these a dinner of marled beef,—we have two pieces left, for the sun's return and the

Fourth of July,—and a bumper of champagne all round; and the elements of our frolic are all registered.

“January 20. This morning at five o’clock—for I am so afflicted with the insomnium of this eternal night that I rise at any time between midnight and noon—I went upon deck. It was absolutely dark; the cold not permitting a swinging lamp. There was not a glimmer came to me through the ice-crusted window-panes of the cabin. While I was feeling my way, half puzzled as to the best method of steering clear of whatever might be before me, two of my Newfoundland dogs put their cold noses against my hand, and instantly commenced the most exuberant antics of satisfaction. It then occurred to me how very dreary and forlorn must these poor animals be, at atmosphere of $+10^{\circ}$ in-doors and -50° without,—living in darkness, howling at an accidental light, as if it reminded them of the moon,—and with nothing, either of instinct or sensation, to tell them of the passing hours, or to explain the long-lost daylight. They shall see the lanterns more frequently.

“February 1. We have seen the sun, for some days, silvering the ice between the headlands of the bay; and to-day, toward noon, I started out to be the first of my party to welcome him back. It was the longest walk and toughest climb that I have had since our imprisonment; and scurvy and general debility have made me ‘short o’ wind.’ But I managed to attain my object. I saw him once more; and upon a projecting crag nestled in the sunshine. It was like bathing in perfumed water.

“March 13. Since January, we have been working at the sledges and other preparations for travel. The

death of my dogs, the rugged obstacles of the ice, and the intense cold have obliged me to reorganize our whole equipment. We have had to discard all our India-rubber fancy-work: canvas shoe-making, fur-socking sewing, carpentering, are all going on; and the cabin, our only fire-warmed apartment, is the work-shop, kitchen, parlor, and hall.

“Not a man now, except Pierre and Morton, is exempt from scurvy; and, as I look around upon the pale faces and haggard looks of my comrades, I feel that we are fighting the battle of life at disadvantage, and that an Arctic night and an Arctic day age a man more rapidly and harshly than a year anywhere else in all this weary world.

“March 20. I saw the depot party off yesterday. They gave the usual three cheers, with three for myself. I gave them the whole of my brother's wedding cake, and my last two bottles of Port, and they pulled the sledge they were harnessed to famously. The party were seen by McGary from aloft, at noon to-day, moving easily, and about twelve miles from the brig.

“We were at work cheerfully, sewing away at the skins of some moccasins by the blaze of our lamps, when, toward midnight of the 31st, we heard the noise of steps above, and the next minute Sontag, Ohlsen, and Petersen came down into the cabin. Their manner startled me even more than their unexpected appearance on board. They were swollen and haggard, and hardly able to speak.

Their story was a fearful one. They had left their companions in the ice, risking their own lives to bring us the news: Brooks, Baker, Wilson, and Pierre were all lying frozen and disabled. Where? They could

IN THE TENT.

PINNACLY BERG.

THE RESCUE PARTY.

not tell: somewhere in among the hummocks to the north and east; it was drifting heavily round them when they parted. Irish Tom had stayed by to feed and care for the others; but the chances were sorely against them. It was in vain to question them further. They had evidently traveled a great distance, for they were sinking with fatigue and hunger, and could hardly be rallied enough to tell us the direction in which they had come.

“My first impulse was to move on the instant with an unencumbered party: a rescue, to be effective or even hopeful, could not be too prompt. What pressed on my mind most was, where the sufferers were to be looked for among the drifts. Ohlsen seemed to have his faculties rather more at command than his associates, and I thought that he might assist us as a guide; but he was sinking with exhaustion, and if he went with us we must carry him.

“There was not a moment to be lost. While some were still busy with the new-comers, and getting ready a hasty meal, others were rigging out the “Little Willie” with a buffalo-cover, a small tent, and a package of pemmican; and, as soon as we could hurry through our arrangements, Ohlsen was strapped on in a fur bag, his legs wrapped in dog-skins and eider-down, and we went off upon the ice. Our party consisted of nine men and myself. We carried only the clothes on our backs.

“A well-known peculiar tower of ice, called by the men the “Pinnacly Berg,” served as our first landmark: other icebergs of colossal size, which stretched in long beaded lines across the bay, helped to guide us afterward; and it was not until we had traveled for sixteen hours that we began to lose our way.

“Pushing ahead of the party, and clambering over some rugged ice-piles, I came to a long level floe, which I thought might probably have attracted the eyes of weary men in circumstances like our own. It was a light conjecture, but it was enough to turn the scale, for there was no other to balance it. I gave orders to abandon the sledge, and disperse in search of foot-marks. We raised our tent, placed our pemmican in *cache*, except a small allowance for each man to carry on his person; and poor Ohlsen, now just able to keep his legs, was liberated from his bag. The thermometer had fallen by this time to $-49^{\circ}.3$, and the wind was setting in sharply from the northwest. It was out of the question to halt: it required brisk exercise to keep us from freezing. I could not even melt ice for water; and, at these temperatures, any resort to snow for the purpose of allaying thirst was followed by bloody lips and tongue: it burnt like caustic.

“It was indispensable then that we should move on, looking out for traces as we went. Yet when the men were ordered to spread themselves, so as to multiply the chances, though they all obeyed heartily, some painful impress of solitary danger, or perhaps it may have been the varying configuration of the ice-field, kept them closing up continually into a single group. The strange manner in which some of us were affected I now attribute as much to shattered nerves as to the direct influence of the cold. Men like McGary and Bonsall, who had stood out our severest marches, were seized with trembling fits and short breath; and, in spite of all my efforts to keep up an example of sound bearing, I fainted twice on the snow.

“We had been nearly eighteen hours out without

water or food, when a new hope cheered us. I think it was Hans, our Esquimaux hunter, who thought he saw a broad sledge-track. The drift had nearly effaced it, and we were some of us doubtful at first whether it was not one of those accidental rifts which the gales make in the surface snow. But, as we traced it on to the deep snow among the hummocks, we were led to footsteps; and, following these with religious care, we at last came in sight of a small American flag fluttering from a hummock, and lower down a little Masonic banner hanging from a tent-pole hardly above the drift. It was the camp of our disabled comrades: we reached it after an unbroken march of twenty-one hours.

“The little tent was nearly covered. I was not among the first to come up; but, when I reached the tent-curtain, the men were standing in silent file on each side of it. With more kindness and delicacy of feeling than is often supposed to belong to sailors, but which is almost characteristic, they intimated their wish that I should go in alone. As I crawled in, and, coming upon the darkness, heard before me the burst of welcome gladness that came from the four poor fellows stretched on their backs, and then for the first time the cheer outside, my weakness and my gratitude together almost overcame me. “They had expected me: they were sure I would come!”

“We were now fifteen souls; the thermometer seventy-five degrees below the freezing point; and our sole accommodation a tent barely able to contain eight persons: more than half our party were obliged to keep from freezing by walking outside while the others slept. We could not halt long. Each of us took a turn of two hours' sleep; and we prepared for our homeward march.

“We took with us nothing but the tent, furs to protect the rescued party, and food for a journey of fifty hours. Everything else was abandoned. Two large buffalo-bags, each made of four skins, were doubled up, so as to form a sort of sack, lined on each side by fur, closed at the bottom but opened at the top. This was laid on the sledge; the tent, smoothly folded, serving as a floor. The sick with their limbs sewed up carefully in reindeer-skins were placed upon the bed of buffalo-ropes, in a half-reclining posture; other skins and blanket-bags were thrown above them; and the whole litter was lashed together so as to allow but a single opening opposite the mouth for breathing.

“This necessary work cost us a great deal of time and effort; but it was essential to the lives of the sufferers. It took us no less than four hours to strip and refresh them, and then to enable them in the manner I have described. It was completed at last, however; all hands stood round; and after repeating a short prayer, we set out on our retreat.

“And yet our march for the first six hours was very cheering. We made by vigorous pulls and lifts nearly a mile an hour, and reached the new floes before we were absolutely weary. Our sledge sustained the trial admirably. Ohlsen, restored by hope, walked steadily at the leading belt of the sledge-lines; and I began to feel certain of reaching our half-way station of the day before, where we had left our tent. But we were still nine miles from it, when, almost without premonition, we all became aware of an alarming failure of our energies.

“Bonsall and Morton, two of our stoutest men, came to me, begging permission to sleep: “they were not cold: the wind did not enter them now: a little sleep

was all they wanted." Presently Hans was found nearly stiff under a drift; and Thomas, bolt upright, had his eyes closed, and could hardly articulate. At last, John Blake threw himself on the snow, and refused to rise. They did not complain of feeling cold; but it was in vain that I wrestled, boxed, ran, argued, jeered, or reprimanded: an immediate halt could not be avoided.

"We pitched our tent with much difficulty. Our hands were too powerless to strike a fire: we were obliged to do without water or food. Even the spirits (whisky) had frozen at the men's feet, under all the coverings. We put Bonsall, Ohlsen, Thomas, and Hans, with the other sick men, well inside the tent, and crowded in as many others as we could. Then, leaving the party in charge of Mr. McGary, with orders to come on after four hours' rest, I pushed ahead with William Godfrey, who volunteered to be my companion. My aim was to reach the halfway tent, and thaw some ice and pemmican before the others arrived.

"The floe was of level ice, and the walking excellent. I cannot tell how long it took us to make the nine miles; for we were in a strange sort of stupor, and had little apprehension of time. It was probably about four hours. We kept ourselves awake by imposing on each other a continued articulation of words; they must have been incoherent enough. I recall these hours as among the most wretched I have ever gone through: we were neither of us in our right senses, and retained a very confused recollection of what preceded our arrival at the tent. We both of us, however, remember a bear, who walked leisurely before us and tore up as he went a jumper that Mr. McGary had improvidently thrown off the day before.

He tore it into shreds and rolled it into a ball, but never offered to interfere with our progress. I remember this, and with it a confused sentiment that our tent and buffalo-robes might probably share the same fate. Godfrey, with whom the memory of this day's work may atone for many faults of later time, had a better eye than myself; and, looking some miles ahead, he could see that our tent was undergoing the same uncereemonious treatment. I thought I saw it too, but we were so drunken with cold that we strode on steadily, and, for aught I know, without quickening our pace.

"Probably our approach saved the contents of the tent; for when we reached it the tent was uninjured, though the bear had overturned it, tossing the buffalo-robes and pemmican into the snow; we missed only a couple of blanket-bags. What we recollect, however, and perhaps all we recollect, is, that we had great difficulty in raising it. We crawled into our reindeer sleeping-bags, without speaking, and for the next three hours slept on in a dreamy but intense slumber.

"We were able to melt water and get some soup cooked before the rest of our party arrived; it took them but five hours to walk the nine miles. They were doing well, and considering the circumstances, in wonderful spirits. The day was most providentially windless, with a clear sun. All enjoyed the refreshment we had got ready: the crippled were repacked in their robes; and we sped briskly toward the hummock ridges which lay between us and the Pinnacly Berg.

"Our halts multiplied and we fell half-sleeping on the snow. I could not prevent it. Strange to say, it re-

freshed us. I ventured upon the experiment myself, making Riley wake me at the end of three minutes; and I felt so much benefited by it that I timed the men in the same way. They sat on the runners of the sledge, fell asleep instantly, and were forced to wakefulness when their three minutes were out.

“By eight in the evening we emerged from the floes. The sight of the Pinnacly Berg revived us. Brandy, an invaluable resource in emergency, had already been served out in tablespoonful doses. We now took a longer rest, and a last but stouter dram, and reached the brig at 1 P.M., we believe without a halt.

“I say *we believe*; and here perhaps is the most decided proof of our sufferings: we were quite delirious, and had ceased to entertain a sane apprehension of the circumstances about us. We moved on like men in a dream. Our footmarks seen afterward showed that we had steered a bee-line for the brig. It must have been by a sort of instinct, for it left no impress on the memory. Bonsall was sent staggering ahead, and reached the brig, God knows how, for he had fallen repeatedly at the track-lines; but he delivered with punctilious accuracy the messages I had sent by him to Dr. Hayes.

Petersen and Whipple came out to meet us about two miles from the brig. They brought my dog-team, with the restoratives I had sent for by Bonsall. I do not remember their coming. Dr. Hayes entered with judicious energy upon the treatment our condition called for, administering morphine freely, after the usual frictions next. Mr. Ohlsen suffered some time from strabismus and blindness: two others underwent amputation of part of the foot, without unpleasant consequences; and two died in spite of all our efforts.

"We were watching in the morning at Baker's death-bed, when one of our deck-watch, who had been cutting ice for the melter, came hurrying down into the cabin with the report, "People halloing ashore!" I went up, followed by as many as could mount the gangway; and there they were, on all sides of our rocky harbor, dotting the snow-shores and emerging from the blackness of the cliffs,—wild and uncouth but evidently human beings.

"As we gathered on the deck, they rose upon the more elevated fragments of the land-ice, standing singly and conspicuously like the figures in a tableau of the opera, and distributing themselves around almost in a half-circle. They were vociferating as if to attract our attention, or perhaps only to give vent to their surprise; but I could make nothing out of their cries, except "Hoah, ha ha!" and "Ka, kǎāh! ha, kǎāh!" repeated over and over again.

"There was light enough for me to see that they brandished no weapons, and were only tossing their heads and arms about in violent gesticulations. A more unexcited inspection showed us, too, that their numbers were not as great nor their size as Patagonian as some of us had been disposed to fancy at first. In a word, I was satisfied that they were natives of the country; and calling Petersen from his bunk to be my interpreter, I proceeded, unarmed and waving my open hands, toward a stout figure who made himself conspicuous and seemed to have a greater number near him than the rest. He evidently understood the movement, for he at once, like a brave fellow, leaped down upon the floe and advanced to meet me fully half-way.

"He was nearly a head taller than myself, extremely

LOADING THE FAITH.

FIRST MEETING WITH ESQUIMAUX.

powerful and well-built, with swarthy complexion and piercing black eyes. His dress was a hooded *capôte* or jumper of mixed white and blue fox-pelts, arranged with something of fancy, and booted trousers of white bear-skin, which at the end of the foot were made to terminate with the claws of the animal.

“Although this was the first time he had ever seen a white man, he went with me fearlessly ; his companions staying behind on the ice. Hickey took them out what he esteemed our greatest delicacies,—slices of good wheat bread, and corned pork, with exorbitant lumps of white sugar ; but they refused to touch them. They had evidently no apprehension of open violence from us. I found afterward that several among them were singly a match for the white bear and the walrus, and that they thought us a very pale-faced crew.

“Being satisfied with my interview in the cabin, I sent out word that the rest might be admitted to the ship ; and, although they, of course, could not know how their chief had been dealt with, some nine or ten of them followed with boisterous readiness upon the bidding. Others in the mean time, as if disposed to give us their company for the full time of a visit, brought up from behind the land-ice as many as fifty-six fine dogs, with their sledges, and secured them within two hundred feet of the brig, driving their lances into the ice, and picketing the dogs to them by the seal-skin traces. The sledges were made up of small fragments of porous bone, admirably knit together by thongs of hide ; the runners, which glistened like burnished steel, were of highly-polished ivory, obtained from the tusks of the walrus. The only arms they carried were knives, concealed in their boots ; but their lances, which were lashed to the sledges, were quite a formidable weapon.

"In the morning they were anxious to go ; but I had given orders to detain them for a parting interview with myself. It resulted in a treaty, brief in its terms, that it might certainly be remembered, and mutually beneficial, that it might possibly be kept. I tried to make them understand what a powerful Prospero they had had for a host, and how beneficent he would prove himself so long as they did his bidding. And as an earnest of my favor, I bought all the walrus-meat they had to spare, and four of their dogs, enriching them in return with needles and beads and a treasure of old cask-staves.

"In the fullness of their gratitude, they pledged themselves emphatically to return in a few days with more meat, and to allow me to use their dogs and sledges for my excursions to the north. I then gave them leave to go. They yoked in their dogs in less than two minutes, got on their sledges, cracked their two-fathom-and-a-half-long seal-skin whip, and were off down the ice to the southwest at a rate of seven knots an hour.

"May 28, Sunday. Our day of rest and devotion. It was a fortnight ago last Friday since our poor friend Pierre died. For nearly two months he had been struggling against the enemy with a resolute will and mirthful spirit, that seemed sure of victory. But he sunk in spite of them.

"The last offices were rendered to him with the same careful ceremonial that we observed at Baker's funeral. There were fewer to walk in the procession ; but the body was encased in a decent pine coffin and carried to Observatory Island, where it was placed side-by-side with that of his messmate. Neither could yet be buried ; but it is hardly necessary to say that

the frost has embalmed their remains. Dr. Hayes read the chapter from Job which has consigned so many to their last resting-place, and a little snow was sprinkled upon the face of the coffin. Pierre was a volunteer not only of our general expedition, but of the party with which he met his death-blow. He was a gallant man, a universal favorite on board, always singing some Béranger ballad or other, and so elastic in his merriment that even in his last sickness he cheered all that were about him."

"May 30. It is a year ago to-day since we left New York. I am not as sanguine as I was then: time and experience have chastened me. There is every thing about me to check enthusiasm and moderate hope. I am here in forced inaction, a broken-down man, oppressed by cares, with many dangers before me, and still under the shadow of a hard wearing winter, which has crushed two of my best associates.

"My mind never realizes the complete catastrophe, the destruction of all Franklin's crews. I picture them to myself broken into detachments, and my mind fixes itself on one little group of some thirty, who have found the open spot of some tidal eddy, and under the teachings of some Esquimaux or perhaps one of their own Greenland whalers, have set bravely to work, and trapped the fox, speared the bear, and killed the seal and walrus and whale. I think of them ever with hope. I sicken not to be able to reach them.

"June 1, Thursday. At ten o'clock this morning the wail of the dogs outside announced the return of Dr. Hayes and William Godfrey. Both of them were completely snow-blind, and the doctor had to be led to my bedside to make his report.

"June 27. McGary and Bonsall are back with

Hickey and Riley. They arrived last evening: all well, except that the snow has effected their eye-sight badly, owing to the scorbutic condition of their systems. Mr. McGary is entirely blind, and I fear will be found slow to cure. They have done admirably. They bring back a continued series of observations, perfectly well kept up, for the further authentication of our survey.

“This is evidently the season when the bears are in most abundance. Their tracks were everywhere, both on shore and upon the floes. One of them had the audacity to attempt intruding itself upon the party during one of their halts upon the ice; and Bon-sall tells a good story of the manner in which they received and returned his salutation, but without in any degree disturbing the unwelcome visitor; specially unwelcome at that time and place, for all the guns had been left on the sledge, a little distance off, and there was not so much as a walking-pole inside. There was of course something of natural confusion in the little council of war. The first impulse was to make a rush for the arms; but this was soon decided to be very doubtfully practicable, if at all, for the bear, having satisfied himself with his observations of the exterior, now presented himself at the tent-opening. Sundry volleys of lucifer matches and some impromptu torches of newspapers were fired without alarming him, and, after a little while, he planted himself at the doorway and began making his supper upon the carcass of a seal which had been shot the day before.

“Tom Hickey was the first to bethink him of the military device of a sortie from the postern, and, cutting a hole with his knife, crawled out at the rear of

TENT ON THE FLOES.

THE BEAR IN CAMP.

GATHERING MOSS.

the tent. Here he extricated a boat-hook, that formed one of the supporters of the ridge-pole, and made it the instrument of a right valorous attack. A blow well administered on the nose caused the animal to retreat for the moment a few paces, beyond the sledge, and Tom, calculating his distance nicely, sprang forward, seized a rifle, and fell back in safety upon his comrades. In a few seconds more, Mr. Bonsall had sent a ball through and through the body of his enemy.

“It was with no slight joy that on the evening of the 10th of July, while walking with Mr. Bonsall, a distant sound of dogs caught my ear. These faithful servants generally bayed their full-mouthed welcome from afar off, but they always dashed in with a wild speed which made their outcry a direct precursor of their arrival. Not so these well-worn travelers. Hans and Morton staggered beside the limping dogs, and poor Jenny was riding as a passenger upon the sledge.

“They left the brig on the 3d of June, and reached the Great Glacier on the 15th, after only twelve days of travel. They showed great judgment in passing the bays; and, although impeded by the heavy snows, would have been able to remain much longer in the field, but for the destruction of our provision-depots by the bears.

“As Morton, leaving Hans and his dogs, passed between Sir John Franklin Island and the narrow beach-line, the coast became more wall-like, and dark masses of porphyritic rock abutted into the sea. With growing difficulty, he managed to climb from rock to rock, in hopes of doubling the promontory and sighting the coast beyond, but the water kept encroaching more and more on his track.

"It must have been an imposing sight, as he stood at this termination of his journey, looking out upon the great waste of waters before him. Not a "speck of ice," to use his own words, could be seen. There, from a height of five hundred and eighty feet, which commanded a horizon of almost forty miles, his ears were gladdened with the novel music of dashing waves; and a surf, breaking in among the rocks at his feet, stayed his further progress.

"Beyond this cape all is surmise. The high ridges to the northwest dwindled off into low blue knobs, which blended finally with the air. Morton called the cape, which baffled his labors, after his commander; but I have given it the more enduring name of Cape Constitution.

"All the sledge-parties were now once more aboard ship, and the season of Arctic travel has ended. For more than ten months we had been imprisoned in ice, and throughout all that period, except during the enforced holiday of the midwinter darkness or while repairing from actual disaster, had been constantly in the field. The summer was wearing on, but still the ice did not break up as it should. As far as we could see, it remained inflexibly solid between us and the North Water of Baffin's Bay.

"The alternative of abandoning the vessel at this early stage of our absence, even were it possible, would, I feel, be dishonoring; but, revolving the question as one of practicability alone, I would not undertake it. In the first place how are we to get along with our sick and newly-amputated men? It is a dreary distance at the best to Upernavik of Beechy Island, our only seats of refuge, and a precarious traverse if we were all of us fit for moving; but we are

MORTON AND HANE ENTERING THE CHANNEL.

MORTON AND HANE LEAVING KENNEDY CHANNEL.

hardly one-half in efficiency of what we count in number. Besides, how can I desert the brig while there is still a chance of saving her? There is no use of noting *pros* and *cons*: my mind is made up; I will not do it."

About the middle of July, Dr. Kane, with five volunteers, started southward hoping to be able to reach Beechy Island, and to communicate with some one of the English ships searching for Franklin. The trip was made in a boat which was dragged to the water, and was exciting and dangerous. On the 31st of July, when within ten miles of Cape Parry, they were stopped by a solid mass of ice which lay directly across their path. On climbing an iceberg they found that all within a radius of thirty miles was an impenetrable sea of ice. Further attempts to proceed being useless, they returned to the brig, halting at Northumberland and Littleton Islands, where they feasted on auks and scurvy grass.

Littleton Island will ever be a locality of great interest, as the last harbor of the *Polaris* was on the the main land opposite, and the place where her crew, after a long residence, started southward in June, 1873.

"August 18. Reduced our allowance of wood to six pounds a meal. This, among eighteen mouths, is one-third of a pound of fuel for each. It allows us coffee twice a day, and soup once. Our fare besides this is cold pork boiled in quantity and eaten as required. This sort of thing works badly; but I must save coal for other emergencies. I see 'darkness ahead.'

"August 20, Sunday. Rest for all hands. The daily prayer is no longer 'Lord accept our gratitude and bless our undertaking,' but 'Lord accept our

gratitude and restore us to our homes.' The ice shows no change: after a boat and foot journey around the entire southeastern curve of the bay, no signs!

"I determined to place upon Observatory Island a large signal-beacon or cairn, and to bury under it documents which, in case of disaster to our party, would convey to any who might seek us intelligence of our proceedings and our fate. The memory of the first winter quarters of Sir John Franklin, and the painful feelings with which, while standing by the graves of his dead, I had four years before sought for written signs pointing to the fate of the living, made me careful to avoid a similar neglect.

"A conspicuous spot was selected upon a cliff looking out upon the icy desert, and on a broad face of rock the words

ADVANCE,

A. D. 1853-54,

were painted in letters which could be read at a distance. A pyramid of heavy stones, perched above it, was marked with the Christian symbol of the cross. It was not without a holier sentiment than that of mere utility that I placed under this the coffins of our two poor comrades. It was our beacon and their gravestone.

"Near this a hole was worked into the rock, and a paper, enclosed in glass, sealed in with melted lead.

"It read as follows:—

"BRIG ADVANCE, August 14, 1854.

"E. K. Kane, with his comrades, Henry Brooks, John Wall Wilson, James McGary, I. I. Hayes, Chris-

tian Ohlsen, Amos Bonsall, Henry Goodfellow, August Sontag, William Morton, J. Carl Petersen, George Stephenson, Jefferson Temple Baker, George Riley, Peter Schubert, George Whipple, John Blake, Thomas Hickey, William Godfrey, and Hans Christian, members of the Second Grinnell Expedition in search of Sir John Franklin and the missing crews of the *Erebus* and *Terror*, were forced into this harbor while endeavoring to bore the ice to the north and east.

“They were frozen in on the 8th of September, 1853, and liberated ———

“During this period the labors of the expedition have delineated nine hundred and sixty miles of coastline, without developing any traces of the missing ships or the slightest information bearing upon their fate. The amount of travel to effect this exploration exceeded two thousand miles, all of which was upon foot or by the aid of dogs.

“Greenland has been traced to its northern face, whence it is connected with the farther north of the opposite coast by a great glacier. This coast has been charted as high as lat. $82^{\circ} 27'$. Smith's Sound expands into a capacious bay: it has been surveyed throughout its entire extent. From its northern and eastern corner, in lat. $80^{\circ} 10'$, long. 60° , a channel has been discovered and followed until farther progress was checked by water free from ice. This channel trended nearly due north, and expanded into an apparently open sea, which abounded with birds and bears and marine life.

“The death of the dogs during the winter threw the travel essential to the above discoveries upon the personal efforts of the officers and men. The summer finds them much broken in health and strength.

“Jefferson Temple Baker, and Peter Schubert died from injuries received from cold while in manly performance of their duty. Their remains are deposited under a cairn at the north point of Observatory Island.

“The site of the observatory is seventy-six English feet from the northernmost salient point of this island, in a direction S. 14° E. Its position is in lat. $78^{\circ} 37' 10''$, long. $70^{\circ} 40'$. The mean tidal level is twenty-nine feet below the highest point upon this island. Both of these sites are further designated by copper bolts sealed with melted lead into holes upon the rocks.

“On the 12th of August, 1854, the brig warped from her position, and, after passing inside the group of islands, fastened to the outer floe about a mile to the northwest, where she is now awaiting further changes in the ice.

“Signed,

“E. K. KANE,

“Commanding Expedition.

“FOX-TRAP POINT, August 14, 1854.”

“August 24. At noon to-day I had all hands called, and explained to them frankly the considerations which have determined me to remain where we are. I endeavored to show them that an escape to open water could not succeed, and that the effort must be exceedingly hazardous: I alluded to our duties to the ship: in a word, I advised them strenuously to forego the project. I then told them that I should freely give my permission to such as were desirous of making the attempt, but that I should require them to place themselves under the command of officers selected by them before setting out, and to renounce in writing all

claims upon myself and the rest who were resolved to stay by the vessel. Having done this, I directed the roll to be called, and each man to answer for himself.

“In the result, eight out of the seventeen survivors of my party resolved to stand by the brig. It is just that I should record their names. They were Henry Brooks, James McGary, J. W. Wilson, Henry Goodfellow, William Morton, Christian Ohlsen, Thomas Hickey, Hans Christian.

“I divided to the others their portion of our resources justly and even liberally; and they left us on Monday, the 28th, with every appliance our narrow circumstances could furnish to speed and guard them. One of them, George Riley, returned a few days afterward; but weary months went by before we saw the rest again. They carried with them a written assurance of a brother's welcome should they be driven back; and this assurance was redeemed when hard trials had prepared them to share again our fortunes.

“The party moved off with the elastic step of men confident in their purpose, and were out of sight in a few hours. As we lost them among the hummocks, the stern realities of our condition pressed themselves upon us anew. The reduced numbers of our party, the helplessness of many, the waning efficiency of all, the impending winter with its cold, dark night, our penury of resources, the dreary sense of increased isolation,—these made the staple of our thoughts. For a time, Sir John Franklin and his party, our daily topic through so many months, gave place to the question of our own fortunes,—how we were to escape, how to live. The summer had gone, the harvest was ended, and ——— We did not care to finish the sentence.

“When the three visitors came to us near the end of August, I established them in a tent below deck, with a copper lamp, a cooking-basin, and a liberal supply of slush for fuel. I left them under guard when I went to bed at two in the morning, contentedly eating and cooking and eating again without the promise of an intermission. An American or an European would have slept after such a debauch till the recognized hour for hock and seltzer-water. But our guests managed to elude the officer of the deck and escape unsearched. They repaid my liberality by stealing not only the lamp, boiler, and cooking-pot they had used for the feast, but Nannook also, my best dog. ‘If the rest of my team had not been worn down by over-travel, no doubt they would have taken them all. Besides this, we discovered the next morning that they had found the buffalo-robes and Indian-rubber cloth which McGary had left a few days before on the ice-foot near Six-mile Ravine, and had added the whole to the spoils of their visit.

“I was puzzled how to inflict punishment, but saw that I must act vigorously, even at a venture. I despatched my two best walkers, Morton and Riley, as soon as I heard of the theft of the stores, with orders to make all speed to Anoatok, and overtake the thieves, who, I thought, would probably halt there to rest. They found young Myouk making himself quite comfortable in the hut, in company with Sievu, the wife of Metek, and Aningna, the wife of Marsinga, and my buffalo-robes already tailored into kapetahs on their backs.

“A continued search of the premises recovered the cooking-utensils, and a number of other things of greater or less value that we had not missed from the

KENNEDY CHANNEL.

VIEW FROM CAPE CONSTITUTION.

brig. With the prompt ceremonial which outraged law delights in among the officials of the police everywhere, the women were stripped and tied; and then, laden with their stolen goods and as much walrus-beef besides from their own stores as would pay for their board, they were marched on the instant back to the brig. .

“The thirty miles was a hard walk for them; but they did not complain, nor did their constabulary guardians, who had marched thirty miles already to apprehend them. It was hardly twenty-four hours since they left the brig with their booty before they were prisoners in the hold, with a dreadful white man for keeper, who never addressed to them a word that had not all the terrors of an unintelligible reproof, and whose scowl, I flatter myself, exhibited a well-arranged variety of menacing and demoniacal expressions.

“They had not even the companionship of Myouk. Him I had despatched to Metek, ‘head-man of Etah, and others,” with the message of a melo-dramatic tyrant, to negotiate for their ransom. For five long days the women had to sigh and sing and cry in solitary converse,—their appetite continuing excellent, it should be remarked, though mourning the while a rightfully-impending doom. At last the great Metek arrived. He brought with him Ootuniah, another man of elevated social position, and quite a sledge-load of knives, tin cups, and other stolen goods, refuse of wood and scraps of iron, the sinful prizes of many covetings.

“I may pass over our peace conferences and the indirect advantages which I of course derived from having the opposing powers represented in my own cap-

ital. But the splendors of our Arctic centre of civilization, with its wonders of art and science,—our “fire-death” ordnance included,—could not all of them impress Metek so much as the intimations he had received of our superior physical endowments.

“The protocol was arranged without difficulty, though not without the accustomed number of adjournments for festivity and repose. It abounded in protestations of power, fearlessness, and good-will by each of the contracting parties, which meant as much as such protestations usually do on both sides the Arctic circle.

“On the part of the *Inuit*, the Esquimaux, they were after this fashion:—

““We promise that we will not steal. We promise we will bring you fresh meat. We promise we will sell or lend you dogs. We will keep you company whenever you want us, and show you where to find the game.”

“On the part of the *Kablunah*, the white men, the stipulation was this ample equivalent:—

““We promise that we will not visit you with death or sorcery, nor do you any hurt or mischief whatsoever. We will shoot for you on our hunts. You shall be made welcome aboard ship. We will give you presents of needles, pins, two kinds of knife, a hoop, three bits of hard wood, some fat, an awl, and some sewing-thread; and we will trade with you of these and every thing else you want for walrus and seal-meat of the first quality.”

“And the closing formula might have read, if the Esquimaux political system had included reading among its qualifications for diplomacy, in this time-consecrated and, in civilized regions, veracious assurance:—

“‘ We, the high contracting parties pledge ourselves now and forever brothers and friends.’

“This treaty—which, though I have spoken of it jocosely, was really an affair of much interest to us—was ratified with Hans and Morton as my accredited representatives, by a full assembly of the people at Etah. All our future intercourse was conducted by it. It was not solemnized by any oath; but it was never broken. We went to and fro between the villages and the brig, paid our visits of courtesy and necessity on both sides, met each other in hunting parties on the floe and the ice-foot, organized a general community of interests, and really, I believe, established some personal attachments deserving of the name. As long as we remained prisoners of the ice, we were indebted to them for invaluable counsel in relation to our hunting expeditions; and in the joint hunt we shared alike, according to their own laws. Our dogs were in one sense common property; and often have they robbed themselves to offer supplies of food to our starving teams. They gave us supplies of meat at critical periods: we were able to do as much for them. They learned to look on us only as benefactors; and, I know, mourned our departure bitterly.

“September 22. I am off for the walrus-grounds with our wild allies. It will be my sixth trip. I know the country and its landmarks now as well as any of them, and can name every rock and chasm and watercourse, in night or fog, just as I could the familiar spots about the dear Old Mills where I passed my childhood.

“September 29. I returned last night from Anoa-tok, after a journey of much risk and exposure, that I should have avoided but for the insuperable obstinacy of our savage friends.

"I set out for the walrus grounds at noon, by the track of the 'Wind Point' of Anoatok, known to us as Esquimaux Point. I took the light sledge, and, in addition to the five of my available team, harnessed in two animals belonging to the Esquimaux. Ootuniah, Myouk, and the dark stranger accompanied me, with Morton and Hans.

"At about 10 P.M., we had lost the land, and, while driving the dogs rapidly, all of us running alongside of them, we took a wrong direction, and traveled out toward the floating ice of the Sound. We had to keep moving, for we could not camp in the gale, that blew around us so fiercely that we could scarcely hold down the sledge. But we moved with caution, feeling our way with the tent-poles, which I distributed among the party for the purpose. A murmur had reached my ear for some time in the cadences of the storm, steadier and deeper, I thought, than the tone of the wind: on a sudden it struck me that I heard the noise of waves, and that we must be coming close on the open water. I had hardly time for the hurried order, 'Turn the dogs,' before a wreath of wet frost-smoke swept over us, and the sea showed itself, with a great fringe of foam, hardly a quarter of a mile ahead. We could now guess our position and its dangers. The ice was breaking up before the storm, and it was not certain that even a direct retreat in the face of the gale would extricate us.

"It was pitchy dark. I persuaded Ootuniah, the eldest of the Esquimaux, to have a tent-pole lashed horizontally across his shoulders. I gave him the end of a line, which I had fastened at the other end round my waist. The rest of the party followed him. At last one after another succeeded in clambering after me upon the ice-foot, driving the dogs before them.

ESQUIMAUX EUT.

WILD DOG TEAM

"Providence had been our guide. The shore on which we landed was Anoatok, not four hundred yards from the familiar Esquimaux homestead. With a shout of joy, each man in his own dialect, we hastened to the 'wind-loved spot;' and in less than an hour, our lamps burning cheerfully, we were discussing a famous stew of walrus-steaks, none the less relished for an unbroken ice-walk of forty-eight miles and twenty haltless hours.

"Time had done its work on the igloë of Anoatok, as among the palatial structures of more southern deserts. The entire front of the dome had fallen in, closing up the tossut, and forcing us to enter at the solitary window above it. The breach was large enough to admit a sledge team; but our Arctic comrades showed no anxiety to close it up. Their clothes saturated with the freezing water of the floes, these iron men gathered themselves round the blubber-fire and steamed away in apparent comfort. The only departure from their practised routine, which the bleak night and open roof seemed to suggest to them, was that they did not strip themselves naked before coming into the hut, and hang up their vestments in the air to dry, like a votive offering to the god of the sea.

"The chant and the feed and the ceremony all completed, Hans, Morton, and myself crawled feet-foremost into our buffalo-bag, and Ootuniah, Awahtok, and Myouk flung themselves outside the skin between us. The last I heard of them or anything else was the renewed chorus of 'Nalegak! nalegak! nalegak-soak!' mingling itself sleepily in my dreams with school-boy memories of Aristophanes and The Frogs. I slept eleven hours.

“October 7. Lively sensation, as they say in the land of olives, and champagne. ‘Nannook, nannook!’—‘A bear, a bear!’—Hans and Morton in a breath!

“To the scandal of our domestic regulations, the guns were all impracticable. While the men were loading and capping anew, I seized my pillow-companion six-shooter, and ran on deck. A medium-sized bear, with a four months’ cub, was in active warfare with our dogs. They were hanging on her skirts, and she with wonderful alertness was picking out one victim after another, snatching him by the nape of the neck, and flinging him many feet or rather yards, by a barely perceptible movement of her head.

“Tudla, our master dog, was already *hors de combat*: he had been tossed twice. Jenny, just as I emerged from the hatch, was making an extraordinary somerset of some eight fathoms, and alighted senseless. Old Whitey, stanch, but not bear-wise, had been the first in the battle: he was yelping in helplessness on the snow.

“It seemed as if the controversy was adjourned and Nannook evidently thought so; for she turned off to our beef-barrels, and began in the most unconcerned manner to turn them over and nose out their fatness.

“October 11. There is no need of looking at the thermometer and comparing registers, to show how far this season has advanced beyond its fellow of last year. The ice-foot is more easily read, and quite as certain.

“The under part of it is covered now with long stalactitic columns of ice, unlike the ordinary icicle in shape, for they have the characteristic bulge of the carbonate-of-lime stalactite. They look like the fantastic columns hanging from the roof of a frozen tem-

ple, the dark recess behind them giving all the effect of a grotto. There is one that brings back to me saddened memories of Elephanta and the merry friends that bore me company under its rock-chiselled portico. The fig-trees and the palms, and the gallant major's curries and his old India ale, are wanting in the picture. Sometimes again it is a canopy fringed with gems in the moonlight. Nothing can be purer or more beautiful.

"Morton reached the huts beyond Anoatok upon the fourth day after leaving the brig. There were four huts; but two of them are in ruins. They were all of them the homes of families only four winters ago. Of the two which are still habitable, Myouk, his father, mother, brother, and sister occupied one; and Awahtok and Ootuniah, with their wives and three young ones the other.

"It was evident from the meagreness of the larder that the hunters of the family had work to do; and from some signs which did not escape the sagacity of Morton it was plain that Myouk and his father had determined to seek their next dinner upon the floes. They were going upon a walrus-hunt; and Morton, true to the mission with which I had charged him, invited himself and Hans to be of the party.

"I have not yet described one of these exciting incidents of Esquimaux life. Morton was full of the one he witnessed; and his account of it when he came back was so graphic that I should be glad to escape from the egotism of personal narrative by giving it in his own language."

CHAPTER XXXV.

DR. KANE'S SECOND EXPEDITION.

(CONTINUED.)

My narrative has reached a period at which every thing like progress was suspended. The increasing cold and brightening stars, the labors and anxieties and sickness that pressed upon us,—these almost engross the pages of my journal. Now and then I find some marvel of Petersen's about the fox's dexterity as a hunter; and Hans tells me of domestic life in South Greenland, or of a seal-hunt and a wrecked kayack; or perhaps McGary repeats his thrice-told tale of humor; but the night has closed down upon us, and we are hibernating through it.

“Yet some of these were topics of interest. The intense beauty of the Arctic firmament can hardly be imagined. It looked close above our heads, with its stars magnified in glory and the very planets twinkling so much as to baffle the observations of our astronomer. I am afraid to speak of some of these night-scenes. I have trodden the deck and the floes, when the life of earth seemed suspended, its movements, its sounds, its coloring, its companionships; and as I looked on the radiant hemisphere, circling above me as if rendering worship to the unseen Center of light, I have ejaculated in humility of spirit, ‘Lord, what is man that thou art mindful of him?’ And then I have

ARCTIC MOONLIGHT.

THE ICE-FOOT CANOPY

thought of the kindly world we had left, with its revolving sunshine and shadow, and the other stars that gladden it in their changes, and the hearts that warmed to us there; till I lost myself in memories of those who are not;—and they bore me back to the stars again.

“December 1. I am writing at midnight. I have the watch from eight to two. It is day in the moonlight on deck, the thermometer getting up again to 36° below zero. As I came down to the cabin—for so we still call this little moss-lined igloë of ours—every one is asleep, snoring, gritting his teeth, or talking in his dreams. This is pathognomonic; it tells of Arctic winter and its companion, scurvy.

“I was asleep in the forenoon of the 7th, after the fatigue of an extra night-watch, when I was called to the deck by the report of ‘Esquimaux sledges.’ They came on rapidly, five sledges, with teams of six dogs each, most of the drivers strangers to us; and in a few minutes were at the brig. Their errand was of charity: they were bringing back to us Bonsall and Petersen, two of the party that left us on the 28th of August.

“The party had many adventures and much suffering to tell of. They had verified by painful and perilous experience all I had anticipated for them. But the most stirring of their announcements was the condition they had left their associates in, two hundred miles off, divided in their counsels, their energies broken, and their provisions nearly gone. I reserve for another page the history of their wanderings. My first thought was of the means of rescuing and relieving them.

“I resolved to despatch the Esquimaux escort at once

with such supplies as our miserably-imperfect stores allowed, they giving their pledge to carry them with all speed, and, what I felt to be much less certain, with all honesty. We cleaned and boiled and packed a hundred pounds of pork, and sewed up smaller packages of meat-biscuit, bread-dust, and tea; and despatched the whole, some three hundred and fifty pounds, by the returning convoy. Of our own party—those who had remained with the brig—McGary, Hans, and myself were the only ones able to move, and of these McGary was now fairly on the sick list. We could not be absent a single day without jeopardizing the lives of the rest.

“December 12th, Tuesday. Brooks awoke me at three this morning with the cry of ‘Esquimaux again!’ I dressed hastily, and, groping my way over the pile of boxes that leads up from the hold into the darkness above, made out a group of human figures, masked by the hooded jumpers of the natives. They stopped at the gangway, and, as I was about to challenge, one of them sprang forward and grasped my hand. It was Doctor Hayes. A few words, dictated by suffering, certainly not by any anxiety as to his reception, and at his bidding the whole party came upon deck. Poor fellows! I could only grasp their hands and give them a brother’s welcome.

“The thermometer was at minus 50°; they were covered with rime and snow, and were fainting with hunger. It was necessary to use caution in taking them below; for, after an exposure of such fearful intensity and duration as they had gone through, the warmth of the cabin would have prostrated them completely. They had journeyed three hundred and fifty miles; and their last run from the bay near Etah,

some seventy miles in a right line, was through the hummocks at this appalling temperature.

“One by one they all came in and were housed. Poor fellows! as they threw open their Esquimaux garments by the stove, how they relished the scanty luxuries which we had to offer them! The coffee and the meat-biscuit soup, and the molasses and the wheat bread, even the salt pork which our scurvy forbade the rest of us to touch,—how they relished it all! For more than two months they had lived on frozen seal and walrus-meat.

“I cannot crowd the details of their journey into my diary. I have noted some of them from Dr. Hayes's words; but he has promised me a written report, and I wait for it. It was providential that they did not stop for Petersen's return or rely on the engagements which his Esquimaux attendants had made to them as well as to us. The sledges that carried our relief of provisions passed through the Etah settlement on some furtive project, we know not what.

“December 25, Christmas. All together again, the returned and the steadfast, we sat down to our Christmas dinner. There was more love than with the stalled ox of former times; but of herbs none. We forgot our discomforts in the blessings that adhered to us still; and when we thought of the long road ahead of us, we thought of it hopefully. I pledged myself to give them their next Christmas with their homes; and each of us drank his ‘absent friends’ with ferocious zeal over one-eighteenth part of a bottle of sillery—the last of its hamper, and, alas! no longer *mousseux*.

“December 26. The moon is nearly above the cliffs; the thermometer —57° to —45°, the mean of

the past four days. In the midst of this cheering conjunction, I have ahead of me a journey of a hundred miles, to say nothing of the return. Worse than this, I have no landmarks to guide me, and must be my own pioneer. It is a merciful change of conditions that I am the strongest now of the whole party, as last winter I was the weakest. The duty of collecting food is on me.

“December 28. The moon to-morrow will be for twelve hours above the horizon, and so nearly circumpolar afterward as to justify me in the attempt to reach the Esquimaux hunting-ground about Cape Alexander. Every thing is ready; and, God willing, I start to-morrow, and pass the four-hours’ dog-halt in the untenanted hut of Anoatok. Then we have, as it may be, a fifteen, eighteen, or twenty hours’ march, run and drive, before we reach a shelter among the heathen of the Bay.

“January 22. Busy preparing for a trip to the lower Esquimaux settlement. The barometer remains at the extraordinary height of 30.85,—a bad prelude to a journey!

“January 29. The dogs carried us to the lower curve of the reach before breaking down. I was just beginning to hope for an easy voyage, when Toodla and the Big Yellow gave way nearly together; the latter frightfully contorted by convulsions. There was no remedy for it: the moon went down, and the wretched night was upon us. We groped along the ice-foot, and, after fourteen hours’ painful walking, reached the old hut.

“A dark water-sky extended in a wedge from Littleton to a point north of the cape. Everywhere else the firmament was obscured by mist. The height of

THE BRIG IN HER WINTER CRADLE.

APPROACHING THE DESERTED HUT.

THE OPEN WATER.

the barometer continued as we left it at the brig, and our own sensations of warmth convinced us that we were about to have a snow-storm.

“We hardly expected to meet the Esquimaux here, and were not disappointed. Hans set to work at once to cut out blocks of snow to close up the entrance to the hut. I carried in our blubber-lamp, food, and bedding, unharnessed the dogs, and took them into the same shelter. We were barely housed before the storm broke upon us.

“Here, completely excluded from the knowledge of things without, we spent many miserable hours. We could keep no note of time, and, except by the whirling of the drift against the roof of our kennel, had no information of the state of the weather. We slept, and cooked coffee, and drank coffee, and slept, and cooked coffee, and drank again; and when by our tired instincts we thought twelve hours must have passed, we treated ourselves to a meal,—that is to say, we divided impartial bites out of the raw hind-leg of a fox to give zest to our biscuits spread with frozen tallow. We then turned in to sleep again, no longer heedful of the storm, for it had now buried us deep in with the snow.

“In the morning—that is to say, when the combined light of the noonday dawn and the circum-polar moon permitted our escape—I found, by comparing the time as indicated by the Great Bear with the present increased altitude of the moon, that we had been pent up nearly two days. Under these circumstances we made directly for the hummocks, *en route* for the bay. But here was a disastrous change. The snow had accumulated under the windward sides of the inclined tables to a height so excessive that we

buried sledge, dogs, and drivers, in the effort to work through. It was all in vain that Hans and I harnessed ourselves to, or lifted, levered, twisted, and pulled. Utterly exhausted and sick, I was obliged to give it up. The darkness closed in again, and with difficulty we regained the igloë.

“The ensuing night brought a return to hard freezing temperatures. Our luxurious and downy coverlet was a stiff, clotted lump of ice. In spite of our double lamp, it was a miserable halt. Our provisions grew short; the snow kept on falling, and we had still forty-six miles between us and the Esquimaux.

“I determined to try the land-ice by Fog Inlet; and we worked four hours upon this without a breathing-spell,—utterly in vain. My poor Esquimaux, Hans, adventurous and buoyant as he was, began to cry like a child. Sick, worn out, strength gone, dogs fast and floundering, I am not ashamed to admit that as I thought of the sick men on board, my own equanimity also was at fault.

“We had not been able to get the dogs out, when the big moon appeared above the water-smoke. A familiar hill, ‘Old Beacon Knob,’ was near. I scrambled to its top and reconnoitered the coast around it. The ridge about Cape Hatherton seemed to jut out of a perfect chaos of broken ice. The water—that inexplicable North Water—was there, a long black wedge, overhung by crapy wreaths of smoke, running to the northward and eastward. Better than all yet,—could I be deceived?—a trough through the hummock-ridges, and level plains of ice stretching to the south.

“Hans heard my halloo, and came up to confirm me. But for our disabled dogs and the waning moon-light, we could easily have made our journey. It was with

a rejoiced heart that I made my way back to our miserable little cavern, and restuffed its gaping entrance with the snow. We had no blubber, and of course no fire; but I knew we could gain the brig, and that, after refreshing the dogs and ourselves, we could now assuredly reach the settlements.

“February 12. Hans is off for his hunting-lodge, ‘over the hills and far away,’ beyond Charlotte Wood Fiord. He thinks he can bring back a deer, and the chances are worth the trial. We can manage the small hunt, Petersen and I, till he comes back unless we break down too. But I do not like these symptoms of mine, and Petersen is very far from the man he was. We had a tramp to-day, both of us, after an imaginary deer,—a *bennisoak* that has been supposed for the last three days to be hunting the neighborhood of the waterpools of the brig fiord, and have come back jaded and sad. If Hans gives way, God help us!”

“We worked on board—those of us who could work at all—at arranging a new gangway with a more gentle slope, to let some of the party crawl up from their hospital into the air. We were six, all told, out of eighteen, who could affect to hunt, cook, or nurse.

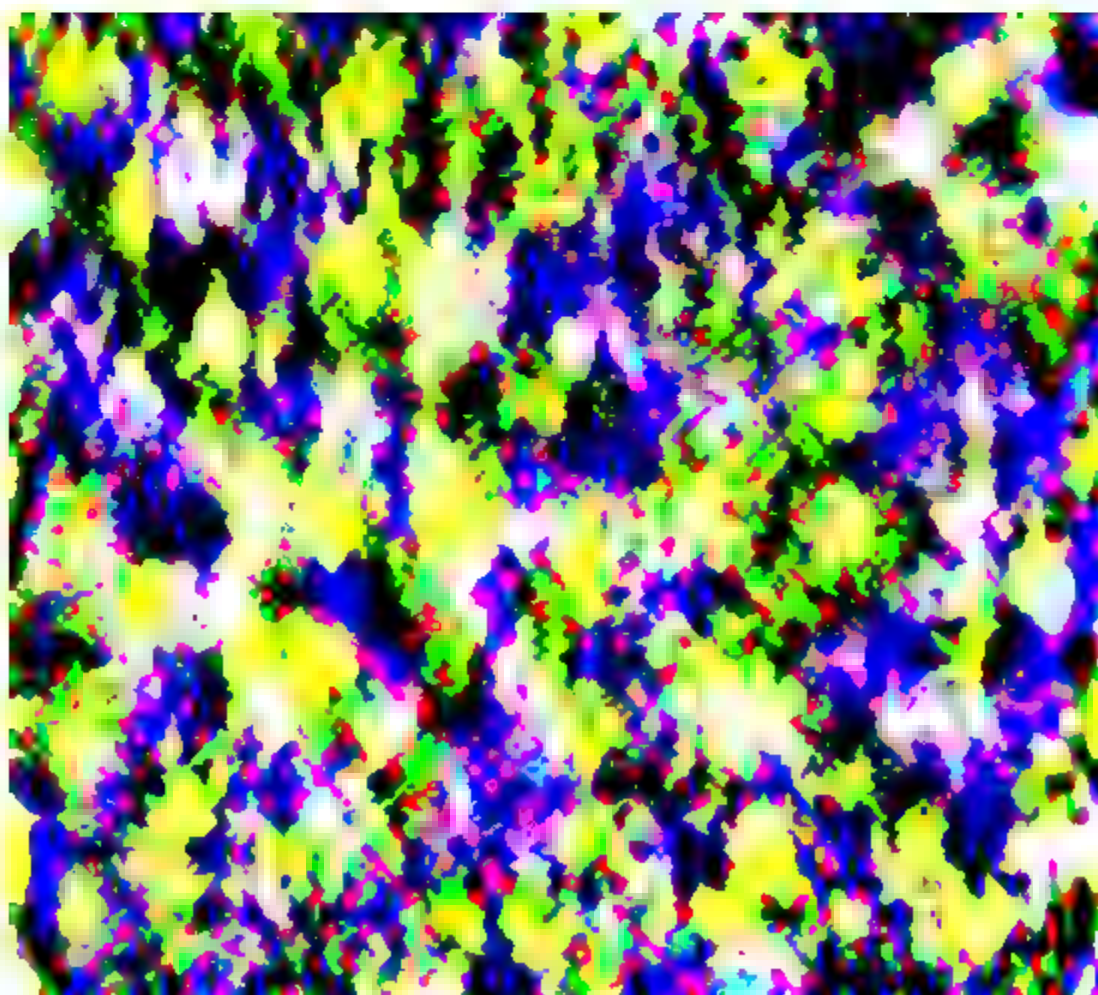
“Meanwhile we tried to dream of commerce with the Esquimaux, and open water and home. For myself, my thoughts have occupation enough in the question of our closing labors. I never lost my hope. I looked to the coming spring as full of responsibilities; but I had bodily strength and moral tone enough to look through them to the end. A trust, based on experience as well as on promises, buoyed me up at the worst of times. Call it fatalism, as you ignorantly may, there is that in the story of every eventful life

which teaches the inefficiency of human means and the present control of a Supreme Agency. See how often relief has come at the moment of extremity, in forms strangely unsought, almost at the time unwelcome ; see, still more, how the back has been strengthened to its increasing burden, and the heart cheered by some unconscious influence of an unseen Power.

“February 21. To-day the crests of the northeast headland were gilded by true sunshine, and all who were able assembled on deck to greet it. The sun rose above the horizon, though still screened from our eyes by intervening hills. Although the powerful refraction of Polar latitudes heralds his direct appearance by brilliant light, this is as far removed from the glorious tints of day as it is from the mere twilight. Nevertheless, for the past ten days we have been watching the growing warmth of our landscape, as it emerged from buried shadow, through all the stages of distinctness of an India-ink washing, step by step, into the sharp, bold definition of our desolate harbor scene. We have marked every dash of color which the great Painter in his benevolence vouchsafed to us ; and now the empurpled blues, clear, unmistakable, the spreading lake, the flickering yellow : peering at all these, poor wretches ! everything seemed superlative luster and unsurpassable glory. We had so grovelled in darkness that we oversaw the light.

“February 22. Washington’s birthday : all our colors flying in the new sunlight. A day of good omen, even to the sojourners among the ice. Hans comes in with great news. He has had a shot at our benesoak, a long shot ; but it reached him. The animal made off at a slow run, but we are sure of him now. This same deer has been hanging round the

ARCTIC SEA-GULLS.



HIDER ISLAND DUCKS.

lake at the fiord through all the dim returning twilight; and so many stories were told of his appearance and movements that he had almost grown into a myth.

"23. Hans was out early this morning on the trail of the wounded deer. Rhina, the least barbarous of our sledge-dogs, assisted him. He was back by noon with the joyful news, 'The tukkuk dead only two miles up big fiord!' The cry found its way through the hatch, and came back in a broken huzza from the sick men.

"February 25, Sunday. The day of rest for those to whom rest can be; the day of grateful recognition for all! John, our volunteer cook of yesterday, is down: Morton, who could crawl out of bed to play baker for the party, and stood to it manfully yesterday, is down too. I have just one man left to help me in caring for the sick. Hans and Petersen, thank God! have vitality enough left to bear the toils of the hunt. One is out with his rifle, the other searching the traps.

"To-day, blessed be the Great Author of Light! I have once more looked upon the sun. I was standing on deck, thinking over our prospects, when a familiar berg, which had long been hid in shadow, flashed out in sun-birth. I knew this berg right well: it stood between Charlotte Wood Fiord and Little Willie's Monument. One year and one day ago I traveled toward it from Fern Rock to catch the sunshine. Then I had to climb the hills beyond, to get the luxury of basking in its brightness; but now, though the sun was but a single degree above the true horizon, it was so much elevated by refraction that the sheen stretched across the trough of the fiord like a

flaming tongue. I could not or would not resist the influence. It was a Sunday act of worship : I started off at an even run, and caught him as he rolled slowly along the horizon, and before he sank. I was again the first of my party to rejoice and meditate in sunshine. It is the third sun I have seen rise for a moment above the long night of an Arctic winter.

“I spare myself as well as the readers of this hastily-compiled volume, when I pass summarily over the details of our condition at this time.

“I look back at it with recollections like those of a nightmare. Yet I was borne up wonderfully. I never doubted for an instant that the same Providence which had guarded us through the long darkness of winter was still watching over us for good, and that it was yet in reserve for us—for some ; I dared not hope for all—to bear back the tidings of our rescue to a Christian land. But how I did not see.

“Two attempts have been made by my orders, in February, to communicate with the Esquimaux at their huts. Both were failures. Peterson, Hans, and Godfrey came back to denounce the journey as impracticable. I know better: the experience of my two attempts in the midst of the darkness satisfies me that at this period of the year, the thing can be done ; and, if I might venture to leave our sick-bay for a week, I would prove it. But there are dispositions and influences here around me, scarcely latent, yet repressed by my presence, which make it my duty at all hazards to stay where I am.

“On the 6th of March, I made the desperate venture of sending off my only trusted and effective huntsman on a sledge-journey to find the Esquimaux of Etah. He took with him our two surviving dogs

in our lightest sledge. In three or at furthest four days more, I counted on his return. No language can express the anxiety with which our poor suffering crew awaited it.

“March 10. Hans has not yet returned; so that he must have reached the settlement. His orders were, if no meat be obtained of the Esquimaux, to borrow their dogs and try for bears along the open water. In this resource I have confidence. The days are magnificent.

“ . . . I had hardly written the above, when ‘*Bim, bim, bim!*’ sounded from the deck, mixed with the chorus of our returning dogs. The next minute Hans and myself were shaking hands.

“He had much to tell us; to men in our condition, Hans was as a man from cities. We of the wilderness flocked around him to hear the news. Sugar-teats of raw meat are passed around. ‘Speak loud, Hans, that they may hear in the bunks.’

“The ‘wind-loved’ Anoatok he had reached on the first night after leaving the brig: no Esquimaux there of course; and he slept not warmly at a temperature of 53° below zero. On the evening of the next day he reached Etah Bay, and was hailed with joyous welcome. But a new phase of Esquimaux life had come upon its indolent, happy, blubber-fed denizens. Instead of plump, greasy children, and round-cheeked matrons Hans saw around him lean figures of misery: the men looked hard and bony, and the children shrivelled in the hoods which cradled them at their mothers’ backs. Famine had been among them; and the skin of a young sea-unicorn, lately caught, was all that remained to them of food. Even their dogs, their main reliance for the hunt and for an escape to some

more favored camping-ground, had fallen a sacrifice to hunger. Only four remained out of thirty: the rest had been eaten.

"Hans behaved well, and carried out my orders in their full spirit. He proposed to aid them in the walrus-hunt. They smiled at first with true Indian contempt: but when they saw my Marston rifle, which he had with him, they changed their tone.

"I have not time to detail Hans's adventurous hunt, equally important to the scurried sick of Rensselaer and the starving residents of Etah Bay. Metek speared a medium-sized walrus, and Hans gave him no less than five Marston balls before he gave up his struggles. The beast was carried back in triumph, and all hands fed as if they could never know famine again.

"I had directed Hans to endeavor to engage Myouk, if he could, to assist him in hunting. A most timely thought: for the morning's work made them receive the invitation as a great favor. Hans got his share of the meat, and returned to the brig accompanied by the boy, who is now under my care on board. This imp—for he is full of the devil—has always had a relishing fancy for the kicks and cuffs with which I recall the forks and teaspoons when they get astray; and, to tell the truth, he always takes care to earn them. He is very happy, but so wasted by hunger that the work of fattening him will be a costly one. Poor little fellow! born to toil and necessity and peril; stern hunter as he already is, the lines of his face are still soft and child-like.

"March 25. Refraction with all its magic is back upon us; the 'Delectable Mountains' appear again; and, as the sun has now worked his way to the margin

THE WALRUS HUNTER.

he himself had made up his mind to go back and spend the rest of his life with Kalutunah and the Esquimaux; and that neither persuasion nor force should divert him from this purpose.

“Upon my presenting a pistol, I succeeded in forcing him back to the gangway of the brig; but he refused to go further; and, being loth to injure him, I left him under the guardianship of Mr. Bonsall’s weapon while I went on board for irons; for both Bonsell and myself were barely able to walk, and utterly incapable of controlling him by manual force and Petersen was out hunting: the rest, thirteen in all, are down with scurvy. I had just reached the deck when he turned to run. Mr. Bonsall’s pistol failed at the cap. I jumped at once to the gun-stand; but my first rifle, affected by the cold, went off in the act of cocking, and a second, aimed in haste at long but practicable distance, missed the fugitive. He made good his escape before we could lay hold of another weapon.

“I am now more anxious than ever about Hans. The past conduct of Godfrey on board, and his mutinous desertion, make me aware that he is capable of daring wrong as well as deception. One thing is plain. This man at large and his comrade still on board, the safety of the whole company exacts the sternest observance of discipline. I have called all hands, and announced it as a standing order of the ship, and one to be observed inflexibly, that desertion, or the attempt to desert, shall be met at once by the sternest penalty. I have no alternative.

April 3. To-day I detained Petersen from his hunt and took a holiday rest myself,—that is to say, went to bed and——sweated: to-morrow I promise as much for Bonsall.

“While here in bed I will give the routine of a day in this spring-time of year:

“At 7:30 call ‘all hands;’ which means that one of the well trio wakes the other two. This order is obeyed slowly. The commander confesses for himself that the breakfast is well-nigh upon the table before he gets his stiff ankles to the floor. Looking around, he sees the usual mosaic of sleepers as ingeniously dovetailed and crowded together as the campers-out in a buffalo-bag. He winds his way through them, and, as he does so, some stereotyped remarks are interchanged. ‘Thomas!’—our ex-cook, now side by side with the first officer of the expedition,—‘Thomas, turn out!’ ‘Eugh-ng, sir. ‘Turn out; get up.’ Ys-sir;’ (sits bolt upright, and rubs his eyes.) ‘How d’you feel, Mr. Ohlsen?’ ‘Better, sir.’ ‘How’ve you passed the night, Mr. Brooks?’ ‘Middlin’, sir.’ And after a diversified series of spavined efforts, the mystical number forms its triangle at the table.

“It still stands in its simple dignity, an unclothed platform of boards, with a pile of plates in the center. Near these is a virtuoso collection of cups grouped in a tumulus or cairn, commencing philosophically at the base with heavy stoneware, and ending with battered tin: the absolute pinnacle a debased dredging box, which makes a bad goblet, being unpleasantly sharp at its rim. At one end of this table, partly hid by the beer-barrel, stands Petersen; at the side, Bonsall; and a lime-juice cask opposite makes my seat. We are all standing: a momentary hush is made among the sick; and the daily prayer comes with one heart:—‘Accept our gratitude, and restore us to our homes.’

“The act of devotion over, we sit down, and look—not at the breakfast, but at each other.

"April 10, Tuesday. I left the brig at 10½ A.M., with but five dogs and a load so light as to be hardly felt. My dogs, in spite of low feeding, carried me sixty-four miles in eleven hours.

"Faithful Hans! Dear good follower and friend! I was out on the floes just beyond the headlands of our old 'Refuge Harbor,' when I made out a black far in to shoreward. Refraction will deceive a novice on the ice; but we have learned to baffle refraction. By sighting the suspected object with your rifle at rest, you soon detect motion. It was a living animal—a man. Shoreward went the sledge; off sprang the dogs ten miles an hour, their driver yelling the familiar provocative to speed, 'Nannook! nannook!' 'A bear! a bear!' at the top of his lungs.

"There was no room for mistaking the methodical steal-stalking gait of Hans. He hardly varied from it as we came near; but in about fifteen minutes we were shaking hands and jabbering, in a patois of Esquimaux and English, our mutual news. The poor fellow had been really ill: five days down with severe pains of limbs have left him still a 'little veek;' which means with Hans well used up. I stuck him on the sledge and carried him to Anoatok.

"In this sickness, he told me, he was waited on most carefully at the settlement. A young daughter of Shunghu elected herself his nurse, and her sympathies and smiles have, I fear, made an impression on his heart which a certain damsel near Upernavik might be sorry to hear of.

"April 18. I am just off a two hundred miles' journey, bringing back my deserter, and, what is perhaps quite as important, a sledge-load of choice walrus-cuts.

"I found from Hans that his negotiation for the dogs had failed, and that unless I could do something by individual persuasion I must give up my scheme of a closing exploration to the north. I learned too that Godfrey was playing the great man at Etah, defying recapture; and I was not willing to trust the influence he might exert on my relations with the tribe. I determined that he should return to the brig.

"I began by stratagem. I placed a pair of foot-cuffs on Metek's sledge, and, after looking carefully to my body-companion six-shooter, invited myself to ride back with him to Etah. His nephew remained on board in charge of Hans, and I disguised myself so well in my nessak that, as we moved off, I could easily have passed for the boy Paulik, whose place I had taken.

"As our eighty miles drew to an end, and that which we call the settlement came close in view, its population streamed out to welcome their chief's return. Among the first and most prominent was the individual whom I desired to meet, waving his hand and shouting 'Tima!' as loudly as the choicest savage of them all. An instant later, and I was at his ear, with a short phrase of salutation and its appropriate gesture. He yielded unconditionally at once, and, after walking and running by turns for some eighty miles before the sledge, with a short respite at Anoatok, is now a prisoner on board.

"My remaining errand at Etah was almost as successful. The inmates of the burrows swarmed around me as I arrived. 'Nalegak! nalegak! tima!' was yelled in chorus: never seemed people more anxious to propitiate, or more pleased with an unexpected visit. But they were airily clad, and it blew a north-

wester; and they soon crowded back into their ant-hill. Meantime preparations were making for my indoor reception, and after a little while Metek and myself crawled in on hands and knees, through an extraordinary tossut thirty paces long. As I emerged on the inside, the salute of 'nalegak' was repeated with an increase of energy that was anything but pleasant.

"There were guests before me,—six sturdy denizens of the neighboring settlement. They had been overtaken by the storm while hunting, and were already crowded upon the central dais of honor. They united in the yell of welcome, and I soon found myself gasping the ammoniacal steam of some fourteen vigorous, amply-fed, unwashed, unclothed fellow-lodgers. No hyperbole could exaggerate that which in serious earnest I give as the truth. The platform measured but seven feet in breadth by six in depth, the shape being semi-elliptical. Upon this, including children and excluding myself, were bestowed thirteen persons.

"The kotluk of each matron was glowing with a flame sixteen inches long. A flipper-quarter of walrus, which lay frozen on the floor of the netek, was cut into steaks; and the kolopsuts began to smoke with a burden of ten or fifteen pounds apiece. Metek, with a little amateur aid from some of the sleepers, emptied these without my assistance. I had the most cordial invitation to precede them; but I had seen enough of the culinary régime to render it impossible. I broke my fast on a handful of frozen liver-nuts that Bill brought me, and, bursting out into a profuse perspiration, I stripped like the rest, threw my well-tired carcass across Mrs. Eider-duck's extremities, put her left-



THE ATLUK OR SEAL-HOLE.

SHOOTING SEAL.

WALRUS SPORTING.

hand baby under my armpit, pillowed my head on Myouk's somewhat warm stomach, and thus, an honored guest and in the place of honor, fell asleep.

"We continued toiling on with our complicated preparations till the evening of the 24th, when Hans came back well laden with walrus-meat. Three of the Esquimaux accompanied him, each with his sledge and dog-team fully equipped for a hunt. The leader of the party, Kalutunah, was a noble savage, greatly superior in every thing to the others of his race. He greeted me with respectful courtesy, yet as one who might rightfully expect an equal measure of it in return, and, after a short interchange of salutations, seated himself in the post of honor at my side.

"I waited of course till the company had fed and slept, for among savages especially haste is indecorous, and then, after distributing a few presents, opened to them my project of a northern exploration. Kalutunah received his knife and needles with a 'Kuyanaka,' 'I thank you:' the first thanks I have heard from a native of this upper region. He called me his friend, —'Asakaoteet,' 'I love you well,'—and would be happy, he said, to join the 'nalegak-soak' in a hunt.

"We started with a wild yell of dogs and men in chorus, Kalutunah and myself leading. We halted about thirty miles north of the brig, after edging along the coast about thirty miles to the eastward. Here Shanghu burrowed into a snow-bank and slept, the thermometer standing at -30° . The rest of us turned in to lunch.

"The journey began again as the feast closed, and we should have accomplished my wishes had it not been for the untoward influence of sundry bears. The tracks of these animals were becoming more and more

numerous as we rounded one iceberg after another; and we could see the beds they had worn in the snow while watching for seal. These swayed the dogs from their course: yet we kept edging onward; and when in sight of the northern coast, about thirty miles from the central peak of the 'Three Brothers,' I saw a deep band of stratus lying over the horizon in the direction of Kennedy Channel. This water-sky indicated the continued opening of the channel, and made me more deeply anxious to proceed. But at this moment our dogs encountered a large male bear in the act of devouring a seal. The impulse was irresistible: I lost all control over both dogs and drivers. They seemed dead to every thing but the passion of pursuit. Off they sped with incredible swiftness; the Esquimaux clinging to their sledges and cheering their dogs with loud cries of 'Nannook!' A mad, wild chase, wilder than German legend,—the dogs, wolves; the drivers, devils. After a furious run the animal was brought to bay; the lance and the rifle did their work, and we halted for a general feed. The dogs gorged themselves, the drivers did as much, and we buried the remainder of the carcass in the snow.

"We took a four hours' sleep on the open ice, the most uncomfortable that I remember. Our fatigue had made us dispense with the snow-house; and though I was heavily clad in a full suit of furs, and squeezed myself in between Kalutunah and Shanghu, I could not bear the intense temperature. I rose in the morning stiff and sore. I mention it as a trait of nobleness on the part of Kalutunah, which I appreciated very sensibly at the time, that, seeing me suffer, he took his kapetah from his back and placed it around my feet.

“The next day I tried again to make my friends steer to the northward. But the bears were most numerous upon the Greenland side; and they determined to push on toward the glacier. All my remonstrances and urgent entreaties were unavailing to make them resume their promised route.

“I found now that my projected survey of the northern coast must be abandoned, at least for the time. My next wish was to get back to the brig, and to negotiate with Metek for a purchase or loan of his dogs as my last chance. But even this was not readily gratified. All of Saturday was spent in bear-hunting. The natives, as indomitable as their dogs, made the entire circuit of Dallas Bay, and finally halted again under one of the islands which group themselves between the headlands of Advance Bay and at the base of the glacier.”

CHAPTER XXXVI

DR. KANE'S SECOND EXPEDITION.

(CONTINUED.)

“The detailed preparations for our escape would have little interest for the general reader; but they were so arduous and so important that I cannot pass them by without a special notice. They had been begun from an early day of the fall, and had not been entirely intermitted during our severest winter-trials.

“Recognizing the importance of acting directly upon the men's minds, my first step now was to issue a general order appointing a certain day, the 17th of May, for setting out. Every man had twenty-four hours given him to select and get ready his eight pounds of personal effects. After that, his time was to cease to be his own for any purpose.

“I tried my best also to fix and diffuse impressions that we were going home. But in this I was not always successful: I was displeased, indeed, with the moody indifference with which many went about the tasks to which I put them. The completeness of my preparations I know had its influence; but there were many doubters. Some were convinced that my only object was to move farther south, retaining the brig, however, as a home to retreat to. Others whispered that I wanted to transport the sick to the hunting-grounds and other resources of the lower settlements,

РАУЛИК

АМАК

АССОКОПАК

which I had such difficulty in preventing the mutinous from securing for themselves alone. A few of a more cheerful spirit thought I had resolved to make for some point of look-out, in the hope of a rescue by whalers or English expedition-parties which were supposed still to be within the Arctic circle. The number is unfortunately small of those human beings whom calamity elevates.

“ There was no sign of affectation of spirited enthusiasm upon the memorable day when we first adjusted the boats to their cradles on the sledges and moved them off to the ice-foot. But the ice immediately around the vessel was smooth; and, as the boats had not received their lading, the first labor was an easy one. As the runners moved, the gloom of several countenances was perceptibly lightened. The croakers had protested that we could not stir an inch. These cheering remarks always reach a commander's ears, and I took good care of course to make the outset contradict them. By the time we reached the end of our little level, the tone had improved wonderfully, and we were prepared for the effort of crossing the successive lines of the belt-ice and forcing a way through the smashed material which interposed between us and the ice-foot.

“ This was a work of great difficulty, and sorrowfully exhausting to the poor fellows not yet accustomed to heave together. But in the end I had the satisfaction, before twenty-four hours were over, of seeing our little arks of safety hauled upon the higher plane of the icefoot, in full trim for ornamental exhibition from the brig; their neat canvas housing rigged tent-fashion over the entire length of each; a jaunty little flag made out of one of the commander's obsolete linen

shirts, decorated in stripes from a disused article of stationery, the red ink-bottle, and with a very little of the blue-bag in the star-spangled corner. All hands after this returned on board: I had ready for them the best supper our supplies afforded, and they turned in with minds prepared for their departure next day.

“Our last farewell to the brig was made with more solemnity. The entire ship’s company was collected in our dismantled winter-chamber, to take part in the ceremonial. It was Sunday. Our moss walls had been torn down, and the wood that supported them burned. Our beds were off at the boats. The galley was unfurnished and cold. Every thing about the little den of refuge was desolate.

“We read prayers and a chapter of the Bible; and then, all standing silently round, I took Sir John Franklin’s portrait from its frame and cased it in an India-rubber scroll. I next read the reports of inspection and scurvy which had been made by the several commissioners organized for the purpose, all of them testifying to the necessities under which I was about to act. I then addressed the party: I did not affect to disguise the difficulties that were before us; but I assured them that they could all be overcome by energy and subordination to command: and that the thirteen hundred miles of ice and water that lay between us and North Greenland could be traversed with safety for most of us and hope for all.

“I was met with a right spirit. After a short conference, an engagement was drawn up by one of the officers, and brought to me, with the signatures of all the company, without an exception.

“We then went upon deck: the flags were hoisted

CHILDREN PLAYING BALL.

CATCHING APPLES.

and hauled down again, and our party walked once or twice around the brig, looking at her timbers and exchanging comments upon the scars which reminded them of every stage of her dismantling. Our figure-head—the fair Augusta, the little blue girl with pink cheeks, who had lost her breast by an iceberg and her nose by a nip off Bedevilled Reach—was taken from our bows and placed aboard the ‘Hope.’ ‘She is at any rate wood,’ said the men, when I hesitated about giving them the additional burden; ‘and if we cannot carry her far we can burn her.’

“As I review my notes of the first few days of our ice-journey, I find them full of incidents interesting and even momentous when they occurred, but which cannot claim a place in this narrative. The sledges were advancing slowly, the men often discouraged, and now and then one giving way under the unaccustomed labor; the sick at Anoatok always dreary in their solitude, and suffering, perhaps, under an exacerbation of disease, or, like the rest of us, from a penury of appropriate food. Things looked gloomy enough at times.

“Taking with me Morton, my faithful adjutant always, I hurried on to the brig. It was in the full glare of noon that we entered the familiar curve of Rensselaer Bay. The black spars of our deserted vessel cut sharply against the shores; there was the deeply-marked snow-track that led to Observatory Island and the graves of poor Baker and Schubert, with their cairn and its white-cross beacon: everything looked as when we defiled in funeral procession round the cliffs a year before. But, as we came close upon the brig and drove our dogs up the gangway, along which Bonsall and myself had staggered so often with

our daily loads of ice, we heard the rustling of wings, and a large raven sailed away in the air past Sylvia Headland. It was old Magog, one of a pair that had cautiously haunted near our brig during the last two years. He had already appropriated our homestead.

“We lighted fires in the galley, melted pork, baked a large batch of bread, gathered together a quantity of beans and dried apples, somewhat damaged but still eatable, and by the time our dogs had fed and rested, we were ready for the return. I gave a last look at the desolate galley-stove, the representative of our long winter’s fire-side, at the still bright coppers now full of frozen water, the theodolite, the chart-box, and poor Wilson’s guitar,—one more at the remnant of the old moss walls, the useless daguerreotypes, and the skeletons of dog and deer and bear and musk-ox,—stoppered in the rigging;—and, that done, whipped up my dogs so much after the manner of a sentimentalizing Christian, that our pagan Metek raised a prayer in their behalf.

“It was quite late in the evening when I drew near Etah. I mean that it was verging on to our midnight, the sun being low in the heavens, and the air breathing that solemn stillness which belongs to the sleeping-time of birds and plants. I had not quite reached the little settlement when loud sounds of laughter came to my ear; and, turning the cape, I burst suddenly upon an encampment of the inhabitants.

“Some thirty men, women, and children, were gathered together upon a little face of offal-stained rock. Except a bank of moss, which broke the wind-draught, from the fiord, they were entirely without protection from the weather, though the temperature was 5° below zero. The huts were completely deserted, the

snow tossut had fallen in, and the window was as free and open as summer to the purifying air. Every living thing about the settlement was out upon the bare rocks.

“Rudest of gypsies, how they squalled, and laughed, and snored, and rolled about! Some were sucking bird-skins, others were boiling incredible numbers of auks in huge soapstone pots, and two youngsters, crying, at the top of their voices, ‘Oopegsoak! Oopegsoak!’ were fighting for an owl. It was the only specimen that I had seen except on the wing; but, before I could secure it, they had torn it limb from limb, and were eating its warm flesh and blood, their faces buried among its dishevelled feathers.

“The scene was redolent of plenty and ignorance, the *dolce far niente* of the short-lived Esquimaux summer. Provision for the dark winter was furthest from their thoughts; for, although the rocks were patched with sun-dried birds, a single hunting party from Peteravik could have eaten up their entire supplies in a single night.

“Before I left Etah on my return, I took an early stroll with Sip-su, ‘the handsome boy,’ to the lake back of my old traveling-route, and directly under the face of the glacier.

“He led me first to the play-ground, where all his young friends of the settlement were busy in one of their sports. Each of them had a walrus-rib for a *golph* or *shinny-stick*, and they were contending to drive a *hurley*, made out of the round knob of a flipper-joint, up a bank of frozen snow. Roars of laughter greeted the impatient striker as he missed his blow at the shining ball, and eager cries told how close the match was drawing to an end. They were counting

on the fingers of both hands, eight, eight, eight: the game is ten.

“Strange,—the thought intruded itself, but there was no wisdom in it,—strange that these famine-pinched wanderers of the ice should rejoice in sports and playthings like the children of our own smiling sky, and that parents should fashion for them toy sledges, and harpoons, and nets, miniature emblems of a life of suffering and peril! how strange this joyous merriment under the monitory shadow of these jagged ice-cliffs! My spirit was oppressed as I imagined the possibility of our tarrying longer in these frozen regions; but it was ordinary life with these other children of the same Creator, and they were playing as unconcerned as the birds that circled above our heads. ‘Fear not, therefore: ye are of more value than many sparrows.’

“I was glad when I reached the sick-station to find things so much better. Everybody was stronger, and, as a consequence, more cheerful. They had learned housekeeping with its courtesies as well as comforts. Their kotluk would have done credit to Aningnah herself: they had a dish of tea for us, and a lump of walrus; and they bestirred themselves real housewife-fashion, to give us the warm place and make us comfortable. I was right sorry to leave them, for the snow outside was drifting with the gale; but after a little while the dogs struck the track of the sledges, and, following it with unerring instinct, did not slacken their pace till they had brought us to our companions on the floe.

“They had wisely halted on account of the storm, and, with their three little boats drawn up side by side for mutual protection, had been lying to for the past

two days, tightly housed, and moored fast by whale-lines to the ice. But the drifts had almost buried the 'Hope,' which was the windward boat; and when I saw the burly form of Brooks emerging from the snow-covered roof, I could have fancied it a walrus rising through the ice.

"Six Esquimaux, three of them women,—the ugly beauty, Nessark's wife, at the head of them,—had come off to the boats for shelter from the gale. They seemed so entirely deferential, and to recognize with such simple trust our mutual relations of alliance, that I resolved to drive down to Etah with Petersen as interpreter, and formally claim assistance, according to their own laws, on the ground of our established brotherhood.

"Our dogs moved slowly, and the discolored ice admonished me to make long circuits. As we neared Littleton Island, the wind blew so fiercely from the southwest, that I determined to take the in-shore channel and attempt to make the settlement over land. But I was hardly under the lee of the island, when there broke upon us one of the most fearful gales I have ever experienced. It had the character and the force of a cyclone. The dogs were literally blown from their harness, and it was only by throwing ourselves on our faces that we saved ourselves from being swept away: it seemed as if the ice must give way. We availed ourselves of a momentary lull to shoulder the sledge, and, calling the affrighted dogs around us, made for the rocks of Eider Island, and, after the most exhausting exertions, succeeded in gaining terra firma.

"We struck a headland on the main shore, where a dark hornblende rock, perhaps thirty feet high, had

formed a barricade, behind which the drifts piled themselves; and into this mound of snow we had just strength enough left to dig a burrow. We knew it soon after as Cape Misery.

“The dogs and sledge were dragged in, and Petersen and myself, reclining ‘spoon-fashion,’ cowered among them. The snow piled over us all, and we were very soon so roofed in and quilted round that the storm seemed to rage far outside of us. We could only hear the wind droning like a great fly-wheel, except when a surge of greater malignity would sweep up over our burial-place and sift the snow upon the surface like hail. Our greatest enemy here was warmth. Our fur jumpers had been literally torn off our backs by the wind; but the united respiration of dogs and men melted the snow around us, and we were soon wet to the skin.

“Is it possible to imagine a juncture of more comic annoyance than that which now introduced itself among the terrors of our position? Toodla, our master-dog, was seized with a violent fit; and, as their custom is, his companions indulged in a family conflict upon the occasion, which was only mediated, after much effort, at the sacrifice of all that remained of Petersen’s pantaloons and drawers.

“We had all the longing for repose that accompanies extreme prostration, and had been fearing every moment that the combatants would bring the snow down upon us. At last down came our whole canopy, and we were exposed in an instant to the fury of the elements. I do not think, often as I have gone up on deck from a close cabin in a gale at sea, that I was ever more struck with the extreme noise and tumult of a storm.

BOAT CAMP IN A STORM.

GOOD-BYE TO THE ESQUIMAUX.

“Once more snowed up,—for the drift built its crystal palace rapidly about us,—we remained cramped and seething till our appetites reminded us of the necessities of the inner man. To breast the gale was simply impossible; the alternative was to drive before it to the north and east. Forty miles of floundering travel brought us in twenty hours to the party on the floes.

“Still passing slowly on day after day,—I am reluctant to borrow from my journal the details of anxiety and embarrassment with which it abounds throughout this period,—we came at last to the unmistakable neighborhood of the open water. We were off Pekiutlik, the largest of the Littleton Island group, opposite ‘Kosoak,’ the Great River. Here Mr. Wilson and George Whipple rejoined us, under the faithful charge of old Nessark. It was with truly thankful hearts we united in our prayers that evening.

“One only was absent of all the party that remained on our rolls. Hans, the kind son and ardent young lover of Fiskernaes, my well-trusted friend, had been missing for nearly two months. I am loth to tell the story as I believe it, for it may not be the true one, after all, and I would not intimate an unwarranted doubt of the constancy of boyish love. But I must explain, as far as I can at least, why he was not with us when we first looked at the open water. Just before my departure for my April hunt, Hans came to me with a long face, asking permission to visit Peteråvik: ‘he had no boots, and wanted to lay in a stock of walrus-hide for soles: he did not need the dogs; he would rather walk.’ It was a long march, but he was well practised in it, and I consented, of course.

“Hans the faithful—yet, I fear, the faithless—was.

last seen upon a native sledge, driving south from Peter-avik with a maiden at his side, and professedly bound to a new principality at Uwarrow Suk-suk, high up Murchison's Sound. Alas for Hans, the married man!

"June 16. Our boats are at the open water. We see its deep indigo horizon, and hear its roar against the icy beach. Its scent is in our nostrils and our hearts. Our camp is but three-quarters of a mile from the sea: it is at the northern curve of the North Baffin polynia. We must reach it at the southern sweep of Etah Bay, about three miles from Cape Alexander. A dark headland defines the spot. It is more marked than the southern entrance of Smith's Straits. How magnificently the surf beats against its sides.

"The Esquimaux are camped by our side,—the whole settlement of Etah congregated around the 'big caldron' of Cape Alexander, to bid us good-bye. There are Metek, and Nualik his wife, our old acquaintance Mrs. Eider-duck, and their five children, commencing with Myouk, my body-guard, and ending with the ventricose little Accomodah. There is Nessark and Anak his wife; and Tellerk the 'Right Arm,' and Am-aunalik his wife; and Sip-su, and Marsumah and An-ingnah—and who not? I can name them every one, and they know us as well. We have found brothers in a strange land.

"Each one has a knife, or a file, or a saw, or some such treasured keepsake; and the children have a lump of soap, the greatest of all great medicines. The merry little urchins break in upon me even now as I am writing:—'Kuyanake, kuyanake, Nalegak-soak!' 'Thank you, thank you, big chief!' while Myouk is crowding fresh presents of raw birds on me as if I could eat forever,

and poor Aningnah is crying beside the tent-curtain, wiping her eyes on a bird-skin.

"But see! more of them are coming up—boys ten years old pushing forward babies on their sledges. The whole nation is gypsyng with us upon the icy meadows.

"We cook for them in our big camp-kettle; they sleep in the Red Eric; a berg close at hand supplies them with water: and thus, rich in all that they value,—sleep and food and drink and companionship,—with their treasured short-lived summer sun above them, the *beau idéal* and sum of Esquimaux blessings, they seem supremely happy.

"Poor creatures! it is only six months ago that starvation was among them: many of the faces around me have not yet lost the lines of wasting suspense. The walrus-season is again of doubtful productiveness, and they are cut off from their brethren to the south, at Netelik and Appah, until winter rebuilds the avenue of ice. With all this, no thoughts of the future cross them. Babies squall, and women chatter, and the men weave their long yarns with peals of rattling hearty laughter between.

"They listened with breathless interest, closing their circle round me; and, as Petersen described the big ussuk, the white whale, the bear, and the long open water hunts with the kayak and the rifle, they looked at each other with a significance not to be misunderstood.

"It was in the soft subdued light of a Sunday evening, June 17, that, after hauling our boats with much hard labor through hummocks, we stood beside the open seaway. Before midnight we had launched the Red Eric, and given three cheers for Henry Grinnell and 'homeward bound,' unfurling all our flags.

“But we were not yet to embark; for the gale which had been long brooding now began to dash a heavy *wind-lipper* against the floe, and obliged us to retreat before it, hauling our boats back with each fresh breakage of the ice. It rose more fiercely, and we were obliged to give way before it still more. Our goods, which had been stacked upon the ice, had to be carried farther inward. We worked our way back thus, step by step, before the breaking ice, for about two hundred yards. At last it became apparent that the men must sleep and rest, or sink; and, giving up for the present all thoughts of embarking, I hauled the boats at once nearly a mile from the water's edge, where a large iceberg was frozen tight in the floes.

“The gale died away to a calm, and the water became as tranquil as if the gale had never been. All hands were called to prepare for embarking. The boats were stowed, and the cargo divided between them equally; the sledges unlashd and slung outside the gunwales; and on Thursday the 19th, at 4 P.M., with the bay as smooth as a garden-lake, I put off in the *Faith*. She was followed by the *Red Eric* on our quarter, and the *Hope* astern.

“We crossed Murchison Channel on the 23d, and encamped for the night on the land-floe at the base of Cape Perry; a hard day's travel, partly by tracking over ice, partly through tortuous and zigzag leads. The next day brought us to the neighborhood of Fitz Clarence Rock, one of the most interesting monuments that rear themselves along this dreary coast: in a region more familiar to men, it would be a landmark to the navigator. It rises from a field of ice like an Egyptian pyramid surmounted by an obelisk.

“While the men slept after their weary labor, Mo-

Gary and myself climbed the berg for a view ahead. It was a saddening one. Every thing showed how intense the last winter had been. We were close upon the 1st of July, and had a right to look for the North Water of the whalers where we now had solid ice or close pack, both of them almost equally unfavorable to our progress. Far off in the distance—how far I could not measure—rose the Dalrymple Rock, projecting from the lofty precipice of the island ahead; but between us and it the land-ice spread itself from the base of Saunder's Island unbroken to the Far South.

“The imperfect diet of the party was showing itself more and more in the decline of their muscular power. They seemed scarcely aware of it themselves, and referred the difficulty they found in dragging and pushing, to something uncommon about the ice or sledge rather than to their own weakness. But, as we endeavored to renew our labors through the morning fog, belted in on all sides by ice-fields so distorted and rugged as to defy our efforts to cross them, the truth seemed to burst upon every one. We had lost the feeling of hunger, and were almost satisfied with our pasty broth and the large draughts of tea which accompanied it. I was anxious to send our small boat, the *Eric*, across to the lumme-hill of Appah, where I knew from the Esquimaux we should find plenty of birds; but the strength of the party was insufficient to drag her.

“We were sorely disheartened, and could only wait for the fog to rise, in the hope of some smoother platform than that which was about us, or some lead that might save us the painful labor of tracking. I had climbed the iceberg; and there was nothing in view except Dalrymple Rock, with its red brassy face tower-

ing in the unknown distance. But I hardly got back to my boat, before a gale struck us from the northwest, and a floe, taking upon a tongue of ice about a mile to the north of us, began to swing upon it like a pivot and close slowly in upon our narrow resting-place.

“At first our own floe also was driven before the wind ; but in a little while it encountered the stationary ice at the foot of the very rock itself. On the instant the wildest imaginable ruin rose around us. The men sprang mechanically each one to his station, bearing back the boats and stores ; but I gave up for the moment all hope of our escape. It was not a nip, such as is familiar to Arctic navigators ; but the whole platform, where we stood and for hundreds of yards on every side of us, crumbled and crushed and piled and tossed itself madly under the pressure. I do not believe that of our little body of men, all of them disciplined in trials, able to measure danger while combatting it,—I do not believe there is one who this day can explain how or why—hardly when, in fact—we found ourselves afloat. We only know that in the midst of a clamor utterly indescribable, through which the braying of a thousand trumpets could no more have been heard than the voice of a man, we were shaken and raised and whirled and let down again in a swelling waste of broken hummocks, and, as the men grasped their boat-hooks in the stillness that followed, the boats eddied away in a tumultuous skreed of ice and snow and water.

“We were borne along in this manner as long as the unbroken remnant of the in-shore floe continued revolving,—utterly powerless, and catching a glimpse every now and then of the brazen headland that

looked down on us through the snowy sky. At last the floe brought up against the rocks, the looser fragments that hung round it began to separate, and we were able by oars and boat-hooks to force our battered little flotilla clear of them. To our joyful surprise, we soon found ourselves in a stretch of the land-water wide enough to give us rowing-room, and with the assured promise of land close ahead.

“At three o'clock the tide was high enough for us to scale the ice-cliff. One by one we pulled up the boats upon a narrow shelf, the whole sixteen of us uniting at each pull. We were too much worn down to unload; but a deep and narrow gorge opened in the cliffs almost at the spot where we clambered up; and, as we pushed the boats into it on an even keel, the rocks seemed to close above our heads, until an abrupt turn in the course of the ravine placed a protecting cliff between us and the gale. We were completely encaved.

“Just as we had brought in the last boat, the Red Eric, and were shoring her up with blocks of ice, a long-unheard but familiar and unmistakable sound startled and gladdened our ears, and a flock of eiders flecking the sky for a moment passed swiftly in front of us. We knew that we must be at their breeding-grounds; and as we turned in wet and hungry to our long coveted sleep, it was only to dream of eggs and abundance.

“On the 3d of July, the wind began to moderate, though the snow still fell heavily; and the next morning, after a patriotic egg-nog, the liquor borrowed grudgingly from our alcohol-flask, and diluted till it was worthy of temperance praise,—we lowered our boats, and bade a grateful farewell to ‘Weary Man’s

Rest.' We rowed to the southeast end of Wostenholme Island; but the tide left us there, and we moved to the ice-foot.

"Our descent to the coast followed the margin of the fast ice. After passing the Crimson Cliff of Sir John Ross, it wore almost the dress of a holiday excursion,—a rude one perhaps, but truly one in feeling. Our course, except where a protruding glacier interfered with it, was nearly parallel to the shore. The birds along it were rejoicing in the young summer, and when we halted it was upon some green-clothed cape near a stream of water from the ice-field above. Our sportsmen would clamber up the cliffs and come back laden with little auks; great generous fires of turf, that cost nothing but the toil of gathering, blazed merrily; and our happy oarsmen, after a long day's work, made easy by the promise ahead, would stretch themselves in the sunshine and dream happily away till called to the morning wash and prayers. We enjoyed it the more, for we all of us knew that it could not last.

* * * * *

"I was awakened one evening from a weary sleep in my fox-skins, to discover that we had fairly lost our way. The officer at the helm of the leading boat, misled by the irregular shape of a large iceberg that crossed his track, had lost the main lead some time before, and was steering shoreward far out of the true course. The little canal in which he had locked us was hardly two boats'-lengths across, and lost itself not far off in a feeble zigzag both behind and before us: it was evidently closing, and we could not retreat.

"Without apprising the men of our misadventure, I ordered the boats hauled up, and, under pretence of

PROVIDENCE CLIFF.

PASSING THE CRIMSON CLIFF.

drying the clothing and stores, made a camp on the ice. A few hours after, the weather cleared enough for the first time to allow a view of the distance, and McGary and myself climbed a berg some three hundred feet high for the purpose. It was truly fearful: we were deep in the recesses of the bay, surrounded on all sides by stupendous icebergs and tangled floe-pieces. My sturdy second officer, not naturally impressible, and long accustomed to the vicissitudes of whaling life, shed tears at the prospect. There was but one thing to be done: cost what it might, we must harness our sledges again and retrace our way to the westward.

* * * * *

“Things grew worse and worse with us: the old difficulty of breathing came back again, and our feet swelled to such an extent that we were obliged to cut open our canvas boots.

“It must be remembered that we were now in the open bay, in the full line of the great ice-drift to the Atlantic, and in boats so frail and unseaworthy as to require constant bailing to keep them afloat.

“It was at this crisis of our fortunes that we saw a large seal floating,—as is the custom of these animals—on a small patch of ice, and seemingly asleep. It was an ussuk, and so large that I at first mistook it for a walrus. Signal was made for the Hope to follow astern, and, trembling with anxiety, we prepared to crawl down upon him.

“Petersen, with the large English rifle, was stationed in the bow, and stockings were drawn over the oars as mufflers. As we neared the animal, our excitement became so intense that the men could hardly keep stroke. I had a set of signals for such occasions, which spared us the noise of the voice; and when

about three hundred yards off, the oars were taken in, and we moved on in deep silence with a single scull astern.

"He was not asleep, for he reared his head when we were almost within rifle-shot; and to this day I can remember the hard, careworn, almost despairing expression of the men's thin faces as they saw him move: their lives depended on his capture.

"I depressed my hand nervously, as a signal for Petersen to fire. McGary hung upon his oar, and the boat slowly but noiselessly sagging ahead, seemed to me within certain range. Looking at Petersen I saw that the poor fellow was paralyzed by his anxiety, trying vainly to obtain a rest for his gun against the cut-water of the boat. The seal rose on his fore-flippers, gazed at us for a moment with frightened curiosity, and coiled himself for a plunge. At that instant, simultaneously with the crack of our rifle, he relaxed his long length on the ice, and, at the very brink of the water, his head fell helpless to one side.

"I would have ordered another shot, but no discipline could have controlled the men. With a wild yell, each vociferating according to his own impulse, they urged both boats upon the floes. A crowd of hands seized the seal and bore him up to safer ice. The men seemed half crazy: I had not realized how much we were reduced by absolute famine. They ran over the floe, crying and laughing and brandishing their knives. It was not five minutes before every man was sucking his bloody fingers or mouthing long strips of raw blubber.

"This was our last experience of the disagreeable effects of hunger. In the words of George Stephenson, 'The charm was broken, and the dogs were safe.'

The dogs I have said little about, for none of us liked to think of them. The poor creatures Toodla and Whitey had been taken with us as last resources against starvation. They were, as McGary worded it, 'meat on the hoof,' and 'able to carry their own fat over the floes.' Once, near Weary Man's Rest, I had been on the point of killing them; but they had been the leaders of the winter's team, and we could not bear the sacrifice.

"'Terra firma! Terra firma!' How very pleasant it was to look upon, and with what a tingle of excited thankfulness we drew near it! A little time to seek a cove among the wrinkled hills, a little time to exchange congratulations, and then our battered boats were hauled high and dry upon the rocks, and our party, with hearts full of our deliverance, lay down to rest.

"Thus it was that at one of our sleeping-halts upon the rocks—for we still adhered to the old routine—Petersen awoke me with a story. He had just seen and recognized a native, who, in his frail kayak, was evidently seeking eider-down among the islands. The man had once been an inmate of his family. 'Paul Zacharias, don't you know me? I'm Carl Petersen!' 'No,' said the man; 'his wife says he's dead;' and, with a stolid expression of wonder, he stared for a moment at the long beard that loomed at him through the fog, and paddled away with all the energy of fright.

"Two days after this, a mist had settled down upon the islands which embayed us, and when it lifted we found ourselves rowing, in lazy time, under the shadow of Karkamoot. Just then a familiar sound came to us over the water. We had often listened to the

screeching of the gulls or the bark of the fox, and mistaken it for the 'Huk' of the Esquimaux; but this had about it an inflection not to be mistaken, for it died away in the familiar cadence of a 'halloo.'

"Listen, Petersen! oars, men!" 'What is it?'—and he listened quietly at first, and then, trembling, said, in a half whisper, 'Dannemarkers!'

"I remember this, the first tone of Christian voice which had greeted our return to the world. How we all stood up and peered into the distant nooks; and how the cry came to us again, just as, having seen nothing, we were doubting whether the whole was not a dream; and then how, with long sweeps, the white ash cracking under the spring of the rowers, we stood for the cape that the sound proceeded from, and how nervously we scanned the green spots which our experience, grown now into instinct, told us would be the likely camping-ground of wayfarers.

"By-and-by—for we must have been pulling a good half hour—the single mast of a small shallop showed itself; and Petersen, who had been very quiet and grave, burst out into an incoherent fit of crying, only relieved by broken exclamations of mingled Danish and English. "'Tis the Upernavik oil-boat! The Fraulein Flaischer! Carlie Mossyn, the assistant cooper, must be on his road to Kingatok for blubber. The Mariane (the one annual ship) has come, and Carlie Mossyn——' and here he did it all over again, gulping down his words and wringing his hands.

"It was Carlie Mossyn, sure enough. The quiet routine of a Danish settlement is the same year after year, and Petersen had hit upon the exact state of things. The Marine was at Proven, and Carlie Mossyn had come up in the Fraulein Flaischer to get the year's supply of blubber from Kingatok.

CAPE WELCOME.

OUR FIRST KAYAK.

“Here we first got our cloudy vague idea of what had passed in the big world during our absence. The friction of its fierce rotation had not much disturbed this little outpost of civilization, and we thought it a sort of blunder as he told us that France and England were leagued with the Mussulman against the Greek Church. He was a good Lutheran, this assistant cooper, and all news with him had a theological complexion.

“‘What of America? eh, Petersen?’—and we all looked, waiting for him to interpret the answer.

“‘America?’ said Carlie; ‘we don’t know much of that country here, for they have no whalers on the coast; but a steamer and a barque passed up a fortnight ago, and have gone out into the ice to seek your party.

“How gently all the lore of this man oozed out of him! he seemed an oracle, as, with hot-tingling fingers pressed against the gunwale of the boat, we listened to his words. ‘Sebastopol ain’t taken.’ Where and what was Sebastopol?

“But ‘Sir John Franklin?’ There we were at home again,—our own delusive little specialty rose uppermost. Franklin’s party, or traces of the dead which represented it, had been found nearly a thousand miles to the south of where we had been searching for them. He knew it; for the priest (Pastor Kraag) had a German newspaper which told all about it. And so we ‘out oars’ again and rowed into the fogs.

“Another sleeping-halt has passed, and we have all washed clean at the fresh-water basins and furbished up our ragged furs and woolens. Kasarsoak, the snow top of Sanderson’s Hope, shows itself above the mists and we hear the yelling of the dogs. Petersen had

been foreman of the settlement, and he calls my attention, with a sort of pride, to the tolling of the workmen's bell. It is six o'clock. We are nearing the end of our trials. Can it be a dream?—

"We hugged the land by the big harbor, turned the corner by the old brew-house, and, in the midst of a crowd of children, hauled our boats for the last time upon the rocks.

"For eighty-four days we had lived in the open air. Our habits were hard and weather-worn. We could not remain within the four walls of a house without a distressing sense of suffocation. But we drank coffee that night before many a hospitable threshold, and listened again and again to the hymn of welcome, which, sung by many voices, greeted our deliverance."

"On the 16th we left Upernavik in the *Mariane*, a stanch but antiquated little barque, under the command of Captain Ammondson, who promised to drop us at the Shetland Islands. Our little boat, the *Faith*, which was regarded by all of us as a precious relic, took passage along with us. Except the furs on our backs and the documents that recorded our labors and our trials, it was all we brought back of the *Advance* and her fortunes."

CHAPTER XXXVII.

THE HARTSTENE RELIEF EXPEDITION.

AN expedition for the relief of Dr. Kane and his party, commanded by Lieut. Henry J. Hartstene, sailed from New York, May 31st, 1855, precisely two years after the departure of the *Advance* from the same port. It was sent out by authority of Congress, and consisted of two vessels, the bark *Release* and propeller *Arctic*, which penetrated northward as far as Etah, where the searchers met some of Dr. Kane's Esquimaux friends, including the "elfin youth" and "stern walrus hunter" Myouk.

Dr. John K. Kane, a younger brother of the explorer, accompanied the expedition, and prepared a graphic and spirited sketch thereof, which was published in *Putnam's Magazine* for May, 1856, from which the following extracts are taken:—

"Myouk was very quick in understanding us, and equally ready in inventing modes of conveying intelligence. Lead-pencil and paper were called into requisition. I took out my note-book, drew a rough sketch of a brig, and showed it to him. He at once said 'Dokto Kayen,' and pointed to the north. I then drew a reversed sketch, and pointed south. But Myouk, shaking his head, began to sway his body backward and forward, to imitate rowing; then said Dokto

Kayen again, and pointed south. On this, I drew a whole fleet of boats, and invited him to point out how many of these he referred to. He took the pencil from my hand, and altered the sterns of two into sharp-pointed ones, and then held up two fingers, to indicate that there were two of such. I now drew carefully two whale-boats; he made signs of approval, as much as to say that was *the* thing; and, incontinently squatting down, imitated the voice and gestures of a dog-driver, cracking an imaginary whip, and crying hup-hup-hup, at the top of his voice. After which performance he laughed immoderately, and, again pointing south, said Dokto Kayen.

"I was not certain as to his meaning; but, on my drawing a picture of a dog-team, he went through the whole performance afresh, and showed the most extravagant signs of delight at being understood. We found out how many dog-sledges and how many men there were of the doctor's party, in the same manner. We examined several other natives separately, and they all told the same story; nor could we confuse them as to the number of men and boats; they were all clear on that head. Nineteen, they made it, neither more nor less. We tried our best to make them say that the boats had gone north, and the vessel south; but without success. Myouk, on one occasion, being hard pressed, stopped his ears, so as, at least, to secure himself from being supposed to assent to what he had not learning or language enough to controvert.

"At length, a bright thought struck him. He ran down to the beach, and got two white stones; laid them on the ground, and, pointing to the floating masses of ice in the bay, signified to us that these represented the ice. Next, he took a common clay pipe

of Mr. Lovell's, and, pointing to the north, said, vomiaak sooak, or big ship, 'vomiaak sooak, Dokto Kayen.' He next pushed the pipe up between the pebbles, and then pressed them together till the pipe was crushed. Lastly, he pointed to the south, and began imitating the rowing of a boat, the cracking of whips, and the hup-hupping of a dog-driver, vociferating, at intervals, 'Dokto Kayen, he! he! he!' We tried our best to find out how long it had been since the Dokto Kayens had left them, for it was evident that this was their name for the whole party; but we could not make them understand. They would only tell us that their guests had been with them for some time. This they did by pointing to the south, and then following the track of the sun till it reached the north; then after stretching themselves out on the ground and closing their eyes as if in sleep, they would again point to the south, rise up, go down to the lake and pretend to wash their faces.

"We had drifted so far to the south that Lievely was nearer than Upernavik, and Captain Hartstene determined to put in there. It cleared away beautifully towards morning, and we were all on the decks, admiring the clear water and the fantastic shapes of the water-washed icebergs. All hands were in high spirits, the gale had blown in the right direction, and in a few hours we should be in Lievely. The rocks of its land-locked harbor were already in sight. We were discussing our news by anticipation when the man in the crow's nest cried out, "A brig in the harbor!" and the next minute, before we had time to congratulate each other on the chance of sending letters home, that she had hoisted American colors—a delicate compliment, we thought, on the part of our friends, the Danes.

“I believe our captain was about to return it, when, to our surprise, she hoisted another flag, the veritable one which had gone out with the *Advance*, bearing the name of Mr. Henry Grinnell. At the same moment, two boats were seen rounding the point, and pulling towards us. Did they contain our lost friends? Yes; the sailors had settled that. ‘Those are Yankees, sir; no Danes ever feathered their oars that way,’ said an old whaler to me.

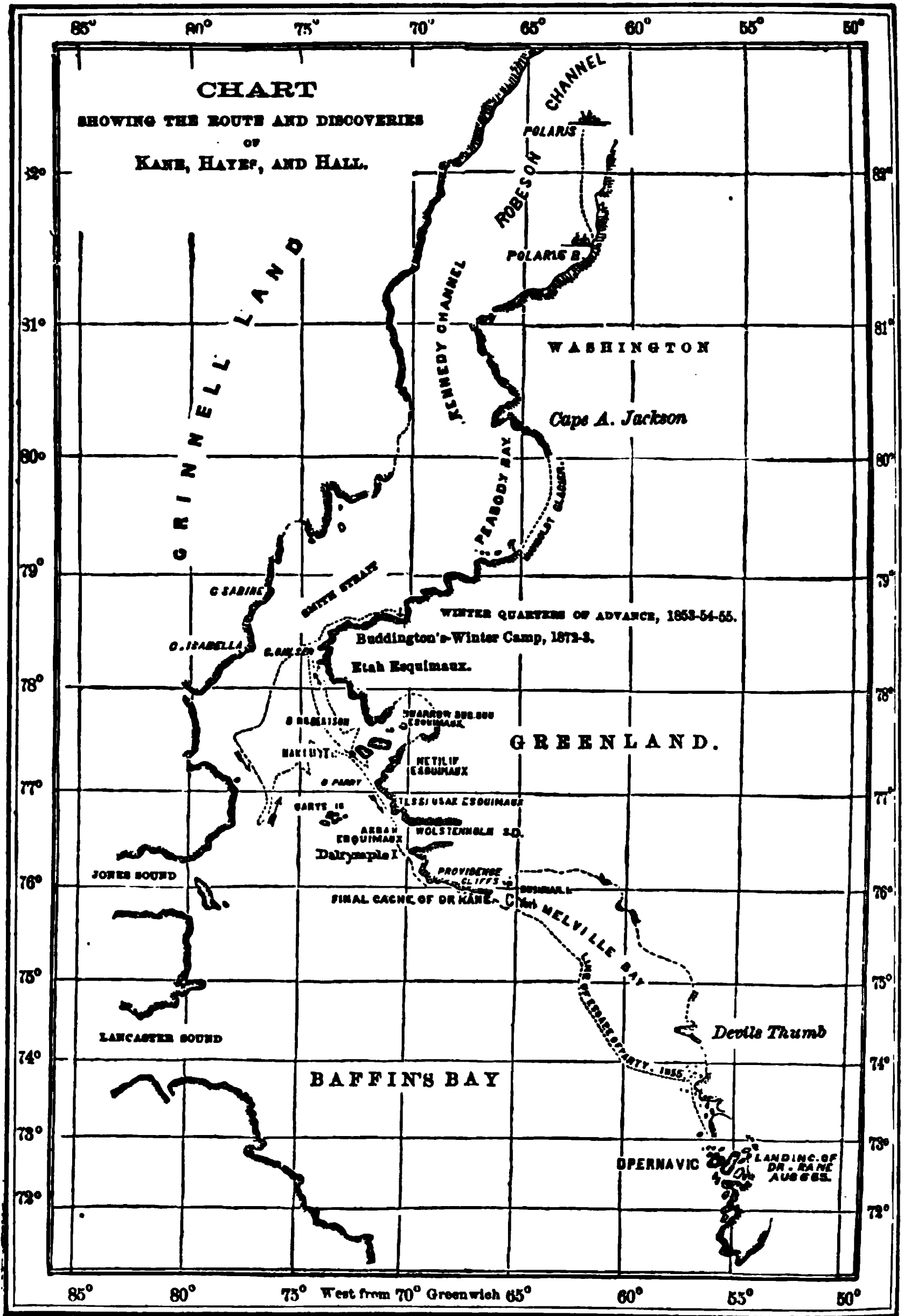
“For those who had friends among the missing party, the few minutes that followed were of bitter anxiety; for the men in the boats were long-bearded and weather-beaten; they had strange, wild costumes; there was no possibility of recognition. Dr. Kane, standing upright in the stern of the first boat, with his spy-glass slung round his neck, was the first identified; then the big form of Mr. Brooks; in another moment all hands of them were on board of us.

“It was curious to watch the effects of the excitement in different people,—the intense quietude of some the boisterous delight of others; how one man would become intensely loquacious, another would do nothing but laugh, and a third would creep away to some out-of-the-way corner, as if he were afraid of showing how he felt. How hungry they all were for news, and how eagerly they tore open the home letters: most of them, poor fellows, had pleasant tidings, and all were prepared to make the best of bad ones. We were in the harbor, with a fleet of kayaks dancing in welcome around and behind us, before the greetings were half ended, for they repeated themselves over and over again.

“Our old friend, Mr. Olrik, was with the new comers, and as happy as the rest. His hospitality,

when we reached the shore, was absolutely boundless; and his house and table were always at our service. Altogether, I never passed three more delightful days than those last days at Lievely. Balls every night; feasts and junketings every day; and, pleasantest of all, those dear home-like tea-tables, with shining tea-urn and clear, white sugar, round which we sat, waiting for the water to boil, and talking of Russia and the Czar, and the world outside the Circle; while Mrs. Olrik would look up from her worsted-work, and the children pressed round me to see the horses and dogs I was drawing for them. It was enough to make one forget his red flannel shirt and rough Arctic rig; Melville Bay and the pack seemed fables.

"But our stay in Lievely ended. The propeller got up steam, and, taking our bark and the Danish brig Marianne in tow, steamed out of the harbor. All the inhabitants of the town were on the shore to see the last of us. Our visit had been as memorable an incident to them as to ourselves. Where ten dollars is a large marriage dower, Jack's liberality of expenditure seemed absolutely royal. There were moistened eyes among them, for they are essentially kind-hearted; and even the roar of our cannon, in answer to the Danish salute, though it resounded splendidly among the hills, was scarcely heeded, as they stood, with folded arms, watching us disappear in the distance."



CHAPTER XXXVIII.

FRANKLIN'S FATE DISCOVERED.

THE fall of 1854 witnessed the return of the last of all the expeditions which had been sent from England to search for Franklin. The task had been a long and disheartening one; for with the exception of the discovery in 1850, of Franklin's winter-quarters in 1845-46 under Beechey Island, no clue to the whereabouts of his ships or party had been found. Six years of search had, however, made known the entire geography of the regions of Arctic America, and with the exception of a small portion around King William's Land, every coast and harbor had been examined. The unsearched ground would have been more easily accessible to the various expeditions than many of the more remote regions visited by them; but by a strange fatality, all the explorers turned back short of the goal, because they found no cairn, no trace, no record to induce them to push on towards it.

But hardly had men declared the solution of the fate of the lost expedition a hopeless task, when, in October 1854, from the shores of Prince Regent's Inlet, appeared a traveler, Dr. Rae, bringing conclusive proofs that the unsearched region was the scene of the disasters which overwhelmed Franklin and his men. Dr. Rae, in his land expedition of 1853-4, met

at Pelly Bay, on the 17th of May 1854, a party of Esquimaux who had in their possession articles which he identified as having belonged to Franklin's party. The following is Dr. Rae's account of the information which he obtained from these Esquimaux :—

“In the spring, four seasons back, 1850, about forty ‘white men,’ were seen traveling southward over the ice and dragging a boat with them, by some Esquimaux, who were killing seals near the north shore of King William's Land, which is a large island. None of the party could speak the Esquimaux language intelligibly, but by signs the natives were made to understand that their ship, or ships, had been crushed by the ice, and that they were now going to where they expected to find deer to shoot. From the appearance of the men, all of whom except one officer looked thin, they were then supposed to be getting short of provisions, and purchased a small seal from the natives. At a later date the same season, but previous to the breaking up of the ice, the bodies of some thirty persons were discovered on the continent, and five on an island near it, about a long day's journey to the N. W. of a large stream, which can be no other than Back's Great Fish River, as its description and that of the low shore in the neighborhood of Point Ogle and Montreal Island, agree exactly with that of Sir George Back. Some of the bodies had been buried, (probably those of the first victims of famine,) some were in a tent or tents, others under the boat, which had been turned over to form a shelter, and several lay scattered about in different directions. Of those found on the island, one was supposed to have been an officer, as he had a telescope strapped over his shoulders, and his double-barrelled gun lay underneath him.

“From the mutilated state of many of the corpses, and the contents of the kettles, it is evident that our wretched countrymen had been driven to the last resource—cannibalism—as a means of prolonging existence.

“There appeared to have been an abundant stock of ammunition, as the powder was emptied in a heap on the ground by the natives out of the kegs or cases containing it; and a

quantity of ball and shot was found below high-water mark, having probably been left on the ice close to the beach. There must have been a number of watches, compasses, telescopes, guns, (several double-barrelled,) &c., all of which appear to have been broken up, as I saw pieces of those different articles with the Esquimaux, together with some silver spoons and forks. I purchased as many as I could get. A list of the most important of these I enclose, with a rough sketch of the crests and initials on the forks and spoons.

“None of the Esquimaux with whom I conversed had seen the ‘whites,’ nor had they ever been at the place where the bodies were found, but had their information from those who had been there, and who had seen the party when traveling.”

The next season, 1855, Mr. Anderson, an officer of the Hudson's Bay Company, descended the Fish River; but, although traces were found to prove that some portions of the crews of the *Erebus* and *Terror* had actually landed on the banks of that river, and traces of them existed up as far as Franklin's Rapids, no additional information was obtained by the party.

In 1856, Lady Franklin petitioned the Government to make a final effort to find the lost ships, and suggested that the *Resolute*, which had recently been presented by the United States, might be devoted to the purpose. A memorial to the same effect, signed by the leading scientific men, explorers and naval officers of England, accompanied the petition. It was not until April 1857 that the decisive answer was given, that after so many failures, the Government did not feel justified in sending out more brave men to encounter fresh dangers in a cause which was viewed as hopeless.

Lady Franklin now determined to send out another private expedition, and for that purpose purchased and refitted the steam yacht *Fox*. Capt. F. S. McClin-

tock, who had seen much service in the frozen realm, willingly accepted, without pay, the command. He had experienced officers and a crew of twenty-one gallant men. Carl Petersen, a Dane who had served with Penny and Kane, hastened from his home at Copenhagen, where he had been only six days after an absence of a year, to join the expedition as interpreter. Various circumstances combined to retard the departure of the Fox, and it was not till July 1857 that she left the shores of merry England behind her and started on her long and perilous voyage.

Melville Bay was reached about the middle of August. Here the Fox was beset by the ice and frozen in, and was not released until the next April. Meantime she had drifted in the midst of a slow-marching pack which ever rolls from the Pole to the Equator, a distance of twelve hundred miles to the south. Starting northward again on the 7th of May, from Holsteinberg, Greenland, the Fox reached Beechey Island by the middle of August. Here McClintock set up a marble tablet to the memory of the lost explorers. This monument had been constructed in New York City at the request of Lady Franklin, under the direction of Mr. Grinnell, and was taken to Greenland by the Hartstein Expedition, for the purpose of being erected at Beechey Island. But as Lieut. Hartstein did not visit that locality the tablet was left at Godhavn, and there found by McClintock, who carried it to its destination. It was placed upon the raised flagged square, in the centre of which stands the cenotaph recording the names of those who perished in Belcher's Expedition, and near a small tablet which had been erected to the memory of Bellot. The inscription was as follows:—

TO THE MEMORY OF
FRANKLIN,
CROZIER, FITZJAMES,
AND ALL THEIR
GALLANT BROTHER OFFICERS AND FAITHFUL
COMPANIONS WHO HAVE SUFFERED AND PERISHED
IN THE CAUSE OF SCIENCE AND
THE SERVICE OF THEIR COUNTRY.
THIS TABLET
IS ERECTED NEAR THE SPOT WHERE
THEY PASSED THEIR FIRST ARCTIC
WINTER, AND WHENCE THEY ISSUED
FORTH TO CONQUER DIFFICULTIES OR
TO DIE.
IT COMMEMORATES THE GRIEF OF THEIR
ADMIRING COUNTRYMEN AND FRIENDS,
AND THE ANGUISH, SUBDUED BY FAITH,
OF HER WHO HAS LOST, IN THE HEROIC
LEADER OF THE EXPEDITION, THE MOST
DEVOTED AND AFFECTIONATE OF
HUSBANDS.
—
“AND SO HE BRINGETH THEM UNTO THE
HAVEN WHERE THEY WOULD BE.”
1855.

This stone has been entrusted to be affixed in its place by the Officers and Crew of the American Expedition, commanded by Lieut. H. J. Hartstein, in search of Dr. Kane and his companions.

This Tablet having been left at Disco by the American Expedition, which was unable to reach Beechey Island, in 1855, was put on board the Discovery Yacht Fox, and is now set up here by Captain McClintock, R. N., commanding the final expedition of search for ascertaining the fate of Sir John Franklin and his companions, 1858.

After replenishing his stock of provisions from the stores left by the previous expedition, McClintock pushed on, and turning into Peel Sound on the west side of Somerset, was brought up, August 17th, by fixed ice at a point twenty-five miles south of Cape Walker. Baffled, but not disheartened, he immediately retraced his steps, and passing down Prince

Regent's Inlet, arrived on the 20th at the eastern entrance of Ballot Strait.

The scene in that strait was enough to daunt men less accustomed to such dangers. On either side were precipitous walls of granite, topped by mountains covered with snow, while to and fro, in the space between them, the ice was grinding and churning under the influence of a fierce tide. Like a terrier at a rat-hole, the staunch Fox waited for an opportunity to run the gauntlet through this strait into the western sea which led to King William's Land. On the 6th of September they succeeded in reaching the western entrance to the strait, but were then stopped by a belt of ice which stretched across the path and was held fast by a group of small islands.

The winter of 1858-9 now set in, and all hope of reaching the open water had to be abandoned, although it was separated from the Fox only by an ice-field six miles wide. Here was passed an unusually cold and stormy winter; and the resources of Boothia yielded them in fresh food only eight reindeer, two bears, and eighteen seals. In February, several sledge parties were sent out in different directions; McClintock, who went southerly, met forty-five Esquimaux, and during a sojourn of four days among them learned that "several years ago a ship was crushed by the ice off the north shore of King William's Land; that her people landed and went away to the Great Fish River, where they died." These natives had a quantity of wood from a boat left by the "starving white men" on the Great River.

On the 2d of April, Captain McClintock, Captain Young, and Lieutenant Hobson, each with two sledges, started from the Fox to search for the lost ships.

Young went westerly to Prince of Wales Land and made a long journey. McClintock and Hobson went together as far as the Magnetic Pole, and on the way there, learned from some natives that the second vessel had been drifted on shore by the ice in the fall of the same year when the other ship was crushed.

Leaving Hobson to search the west coast of King William's Land, McClintock with Petersen undertook to go down the east side thereof, direct to the Fish River. On his way thither, he met a party of Esquimaux who had been, in 1857, at the wreck spoken of by their countrymen, and who had numerous articles taken therefrom. An intelligent old woman said it was in the fall of the year that the ship was forced on shore; that the starving white men had fallen on their way to the Great River, and that their bodies were found by her countrymen in the following winter. She said that on board the wrecked ship there was one dead white man, and there had been many books as well as other things; but all had been taken away, or destroyed, when she was last at the wreck. The destruction of one ship and the wreck of the other appeared, so far as McClintock could ascertain, to have occurred after their abandonment. No Esquimaux that were met had ever before seen a living white man.

After meeting this party, McClintock pushed on to Montreal Island, in the estuary of the Great Fish River; but he found nothing more than Anderson had reported; and in a careful search of the shores about Point Ogle, and Barrow Island, he was equally unsuccessful. Returning to King William's Land he now struck along its south-western shores, in the hope of discovering the wreck spoken of by the natives; but

could see no signs thereof. When ten miles south of Cape Herschel, he came upon a human skeleton around which were fragments of European clothing. It lay exactly as the famished seamen were said to have fallen, with its head toward Fish River and its face to the ground. At Cape Herschel, McClintock visited the cairn which Simpson had erected in 1839, and hoped to find therein some record; but the cairn had evidently been overhauled and plundered by Esquimaux, and the record, if there had been any, carried off.

In the meantime Hobson had made more important discoveries. After separating from McClintock near the Magnetic Pole on the 28th of April, he proceeded to Cape Felix, the most northern point of King William's Land. Here was found a large cairn and three tents, with clothes, blankets and other articles, but no records. Two smaller cairns were found along the coast, but they contained nothing of much importance.

On the 6th of May Hobson reached Point Victory—so named by Sir James Ross who visited it in 1830. It is on the western coast of King William's Land, some forty miles south of Cape Felix. Here was a large cairn; and among some loose stones which had fallen from its top was found a tin case enclosing a record which gave the first authentic information as to the fate of the lost expedition. This important document was one of those blanks furnished to exploring ships by the British Admiralty for the purpose of being thrown overboard at sea in order to ascertain the set of the current, etc., on which is printed in six languages a request that the finder will note time and place where it was found, and forward it to the

RELICS OF THE LOST EXPLORERS.

DISCOVERY OF FRANKLIN'S CAIRN.

nearest British consul. Written on this paper were two distinct records made at different dates. The first one, occupying the blank space left for such a purpose, was as follows:—

28th of May, { H. M. Ships Erebus and Terror wintered in
1847. { the ice in Lat. $70^{\circ} 5' N.$ Long. $98^{\circ} 23' W.$

Having wintered in 1846–7 at Beechey Island, in Lat. $74^{\circ} 43' 28'' N.$, Long. $91^{\circ} 39' 15'' W.$, after having ascended Wellington Channel to Lat. 77° and returned by the west side of Cornwallis Island.

Sir John Franklin commanding the expedition. All well.

Party consisting of 2 officers and 6 men left the ships on Monday, 24th of May, 1847.

G. M. Gore *Leane*
Chas. F. Des Vœux *Leane*

This record had been written by Lieut. Gore, signed by himself and Vœux, and left by them while on an excursion, at a point four miles north of where it was found. There is an error in it when it states that the winter passed at Beechey Island was that of 1846–7. It should be 1845–6, as the other dates plainly show.

Before a year had passed, Graham Gore was dead, and around the margin of the paper on which were his words of hope and promise, other hands had written the following:—

April 25, 1848, H. M. ships Terror and Erebus were deserted on the 22d April, 5 leagues N. N. W. of this, having been beset since 12th of September, 1846. The officers and crews, consisting of 105 souls, under the command of Captain F. R. M. Crozier, landed here in Lat.

69° 37' 42'', Long. 98° 41'. This paper was found by Lieut. Irving, under the cairn supposed to have been built by Sir James Ross in 1831, four miles to the northward, where it had been deposited by the late commander Gore, in June, 1847. Sir James Ross' pillar has not, however, been found, and the paper has been transferred to this position, which is that in which Sir J. Ross' pillar was erected. Sir John Franklin died on the 11th June, 1847, and the total loss by deaths in the expedition has been to this date, 9 officers and 15 men.

James Fitzjames Captain HMS Erebus

*J. W. Crozier
Captain & Senior Officer
and went on Comorron 26th
for Banks Fish River*

Scattered around this cairn were large quantities of clothing and articles of all kinds, as if these men, aware that they were retreating for their lives, had there abandoned everything which they considered superfluous.

Continuing his search down the western coast, Lieut. Hobson, when in lat. 69° 9', about forty miles below Point Victory, noticed what appeared to be two posts rising above the snow. On examining them closely, he found that they were the awning stanchions of a buried boat, and on clearing away the snow, found in it that which filled the beholders with awe—portions of two human skeletons. One lay in the bow of the boat, and had evidently been disturbed by wolves or other animals; the other was enveloped

with clothes and furs, and lay near the stern. Close beside it were found five watches; and two double-barreled guns—one barrel of each loaded and cocked—standing muzzle upwards against the boat's side, just as they were placed eleven years previously.

A Bible was also found, and a few religious books, one of which—"Christian Melodies"—bore on its title page an inscription from the donor to G. G., (Graham Gore.). There was also a large quantity of clothing, an abundance of ammunition, some tea, chocolate and tobacco, and a great variety of articles which modern sledge-travelers in these regions would consider a useless dead weight. Silver spoons and forks were also found, eight of which bore Franklin's crest, and others the initials of nine of his officers. Fuel was at hand in the shape of a drift-tree lying near by on the beach. Nothing in the shape of records or journals could be discovered.

The boat was twenty-eight feet long, seven and a half feet wide, and was mounted on a heavy oak sledge which was headed north. McClintock, who came upon this boat a few days after Hobson found it, estimated the total weight of the sledge and its load at 1,400 lbs; and is of opinion that it was drawn where it was found by a party who were returning to the ship, probably for provisions, and that they were unable to drag it any further.

From Cape Herschel to the western extremity of King William's Land, the traces of the natives were so numerous as to have completely effaced those of the unfortunate castaways; but from this extreme point to Cape Felix the beach was strewn with signs of their miserable condition, like a rocky shore after some disastrous wreck.

By the 1st of July 1859, all the search-parties had returned to the Fox. The homeward voyage was begun on the 9th of August, and ended on the 21st of September. Three men of the expedition had died from disease and accident during its absence from England. Numerous memorials of the lost expedition were brought home, some of which have been described as follows:—

“In the first case is the ‘ensign’ of one of the ships, reduced almost to shreds, but still preserving its colors, and reminding the spectators of the many cheerless days upon which it must have fluttered sadly, but still proudly, from the mast of the ice-bound vessel. In a corner of the same case is also a thin tin cylinder, stained and time-worn. The casual spectator would hardly notice it, but it stands first in importance of all that has been recovered, for it contains the record of the death of Sir John Franklin—that happy death which saved our brave veteran all the subsequent horrors of the journey to the Fish River. Further on are the rude spear-heads into which the Esquimaux had fashioned the iron they obtained from the wreck; and a box-wood two-foot rule, whitened with exposure, but with the figures on it all as bright as the first day. This was, of course, the property of the carpenter, who, it would appear, had, even when starting on his dread journey, not forgotten the implement of his trade. In the same case is a relic which will arrest the eye of many a passer-by. It is the remains of a silk neck-tie, including the bow, as carefully and elaborately tied as if the poor wearer had been making a wedding toilette. This, which was taken from the neck of a skeleton, is supposed to have belonged to the ship’s steward.

“There are also various articles of plate, the greater portion of which is marked with Sir John Franklin’s device, and two pocket chronometers in excellent preservation. A small silver watch, maker’s name ‘A. Myers, London,’ probably belonged to some young mate or midshipman; and a worm-eaten roll of paper, upon which the single word ‘Majesty’

remains, was possibly the much-prized warrant of some stout boatswain or quartermaster. There is a little amethyst seal, in perfect preservation, and goggles and snow-veils, to protect the eyes from the dazzling whiteness of the polar snow. Two double-barrelled guns, covered with rust, are placed far in on the table. They still contain the charges which were placed in them by hands which have long since lost their cunning. The books recovered are very few; they would, of course, succumb early to the rigors of exposure,—but there is still well preserved a small edition of the ‘Vicar of Wakefield,’ some religious poetry, and a French Testament, on the fly-leaf of which is written, in a delicate female hand, ‘From your attached (the appellation is obliterated) S. M. P.’ The open medicine-chest contains all its bottles and preparations very little injured, and a little cooking-machine has the fuel arranged, the sticks thrust through the bars ready for ignition, and lucifer matches at the side, as it might have been prepared over night for the morning cooking. It would be impossible to exaggerate the interest and importance of all these simple memorials; they tell a tale that will find its way to every heart.”

From the meagre information obtained by the various searchers for Franklin, have been drawn the outlines of a connected account of his expedition and its fate. The Erebus and Terror were last seen in July 1845, in Baffin’s Bay. (See Chapter XXII.) Passing thence into Lancaster Sound, they reached Beechey Island and ascended Wellington Channel to lat. 77°. In returning southerly they sailed around Cornwallis Island, and under the friendly shelter of Beechey Island reposed from their arduous labors. The Polar winter came in upon them like a giant. A shroud of snow enveloped the region, save where sharp and clear against the hard blue sky stood out the gaunt mountain precipices of North Devon and the dark and frowning cliffs of Beechey Island—cliffs too steep for even snow-flakes to hang upon.

The tale of energetic battle with cold, privation, and festering monotony has been often told; why repeat that the officers and men under Franklin in their first winter within the Frozen Zone, as nobly bore the one and cheerfully combatted the other? The ruins and traces left behind them all attest it. The observatory, with its double embankment of earth and stones, its neat finish, and the lavish expenditure of labor in pavement and pathway; the shooting gallery under the cliff, the seats formed of stones, the remains of pleasant picnics in empty bottles and meat-tins strewn about: the elaborate cairn upon the north point of Beechey—a pyramid eight feet high, and at least six feet long on each side of the base—constructed of old meat-tins filled with gravel; all tell the same tale of manful anxiety for physical employment to distract the mind from suffering and solitude.

But at length darkness and winter pass away, sunlight and spring return, and pale faces recover their natural hue. The graves of three of the crew who perished during the long night are paved round by their messmates, and shells from the bay are arranged above them; while Franklin selects, at the request of his men, epitaphs which appeal to the hearts of all—"Choose ye this day whom ye will serve," etc.

The sun has ceased to set, night is as the day, the snow has melted; the yards are crossed, rigging set up, sails are bent, and all signs indicate that the disruption of the frozen surface of the sea is at hand. The day of release arrives; the cracks which radiate over the floes gradually widen, then close again with heavy nips. Presently the look-out man gives a sig-

nal that the ice is in motion. A loud hurrah welcomes the joyful news—a race to witness the break-up of the ice. It moves indeed. The floe heaves and cracks, now presses fearfully in one direction and now in another. A dull moaning is heard as if the very ice cried for mercy, and then, with a sharp report, the mass is shivered into fragments. Water shows in all directions, and the next day the ships are sawed out, sails are set, and a cruise to the westward begun.

At Cape Walker the ships come to anchor. An impenetrable ice-stream, drifting easterly from Parry's Sound, renders further progress in that direction impossible. Southward stretches a promising channel leading direct to the American continent; and down this channel—Peel Sound—the expedition bears away. On the eastern hand rise the steep black cliffs of North Somerset, cut here and there with deep cleft and snow-filled ravine. On the western side, the sandstone cliffs and the sheltered coves of Prince of Wales' Land, have donned their brightest looks, and siren-like, lure the discoverer, by many an unexplored bay and fiord, to delay awhile and visit them. It may not be; the Erebus and Terror press on, for is not Cape Herschel of King William's Land and the American continent ahead—are they not fast nearing it? Once there, will they not have discovered the long-sought passage?

Two degrees of latitude are passed over; the passage contracts; for awhile it looks as if they were in a cul-de-sac; islands locked in with one another, excite some anxiety for a channel. The two ships are close to each other, the eager officers and men crowd gunwale and tops. Hepburn Island bars the

way; they round it. Hurrah, hurrah! the path opens before them, the lands on either hand recede, a sea, an open sea, is before them. They dip their ensigns, and cheer each other in friendly congratulation; joy, joy! another one hundred miles, and King William's Island will rise in view. The prize is now within their grasp, whatever be the cost.

The sailor's prayer for open water is, however, only granted in a limited sense, for when the coast of Prince of Wales' Island is lost to view, and they are no longer shielded by land to the west, the great ice-stream from Melville Island again falls upon it. The ships pass Bellot Strait, and advance down the edge of that ice-stream as far as latitude 71° ; then they must enter the pack and go with it to the southwest. Had they not already passed over two hundred of the three hundred miles between Cape Walker and Cape Herschel? Were they the men to flinch from a struggle for the remaining hundred miles?

That struggle commenced as the winter closed in, and just as King William's Land was in sight the Erebus and Terror were about twelve miles north of Cape Felix. More dangerous and unpromising quarters could hardly have fallen to their lot. Sixteen years previously Ross had stood upon Cape Felix in the month of May, and observed with astonishment the fearful nature of the oceanic ice which was pressed upon the shores, and had in some places been driven inward half a mile.

The second winter passes away and when May comes in, Gore and Vœux, with six men, leave the Erebus on an excursion southward. In the cairn built by Ross at Point Victory they deposit a record,

THE BRIDGE AND TERROR IN THE ICE-STREAM.

FUNERAL OF SIR JOHN FRANKLIN.

and in a week more stand on Cape Herschel; then, after gazing on the shores of America, they hasten back to carry the glad tidings that the ships are really in the direct channel leading to those waters and shores traversed by Franklin in former years, and that the long-sought passage is at last discovered.

Alas! why do their shipmates meet the flushed travelers with sorrow imprinted on pale countenances? Why, as they cheer at the glad tidings they bring, does the tear suffuse the eye of these rough and hardy men? Their chief lies on his death-bed; a long career of honor and of worth is drawing to its close. The shout of victory, which cheered the last hours of Nelson and of Wolfe, rang not less heartily round the bed of the gallant Franklin, and lit up that kind eye with its last gleam of triumph. Like another Moses, he fell when his work was accomplished with the great object of his life in view.

A toll for the brave—the drooping ensigns of England trail only half-mast; officers and men with sad faces walk lightly as if they feared to disturb the mortal remains of him they love so much. The solemn peal of the ship's bell reverberates amongst the masses of solid ice; a group of affectionate followers stand around a huge chasm in the ice, and Fitzjames reads the service for the dead over the grave of Franklin.

The summer wears away, and at last the ice-stream again moves slowly to the south. Ten miles, twenty miles thirty miles are accomplished, though not a foot of open water has been seen. Then the new ice begins to form, the drift diminishes, and when fifteen miles north of Cape Victory and only ninety miles from the continent the ships are again stationary, and

the winter of 1847-48 closes around these forlorn and now desperate men.

The sun of 1848 rises again upon the imprisoned expedition, and never did it look down on a sadder sight. Nine officers and twelve men have perished during the past winter; the survivors one hundred and five in number, a wan, half-starved crew, must leave the ships and escape for their lives. Sledges are loaded with such articles as they suppose may be of use. Two large boats are rigged on sledges, and in them the sick and disabled are placed. Care is taken to have plenty of guns, powder, and shot, for provisions are scarce, and they hope to find deer in the region of the Great Fish River.

On the 22d of April, 1848, the men fell into the drag-ropes of their sledges and boats; the colors were hoisted on the ships, three cheers were given, and without a blush at deserting the Erebus and Terror, Crozier and Fitzjames lead the way to the nearest land named Cape Victory. It took three days to travel these fifteen miles, and already the sad conviction was peeping upon them that they had over-estimated their physical strength. Around the large cairn at Point Victory the shivering men cast away everything that could be spared. Unrolling the record left here in the previous year by Lieut. Gore, Fitzjames wrote around its margin those few but graphic words which tell all we shall ever know of this last page in their history.

In spite of frost-bites and fatigue the party presses on. They *must* keep moving southward or their provisions will be gone before they reach the continent. Day by day they grow weaker and weaker under the toil of dragging their sledges and disabled comrades

through the deep snow and over the rugged ice, and at last, when half way between Point Victory and Cape Herschel it becomes apparent that if any are to be saved there must be a division of the parties and that the sick and weak must stay behind or return to the ships. One of the large boats is here turned with her bow northward, some stay with it, and all that is known of their fate is, that years afterward the boat was found buried in the snow with two skeletons therein ; and that the wandering Esquimaux found another skeleton in one of the ships.

The stronger portion of the divided crews pushed southward and reached the cairn on Cape Herschel ; no one had visited it since it was erected by Dease and Simpson in 1839. Ten miles further on at least one of them died, "with his face to the ground and his head toward Fish River ;" and little else is known of this "forlorn hope" than the information collected from the Esquimaux by Dr. Rae, and given at commencement of this chapter. It is probable that the survivors, under Fitzjames, pushed on to perish in the wilds of the Hudson's Bay Territory. Capt. Hall, however, after visiting King William's Land, concluded that none of the party ever reached the continent. The results of his searches for Franklin are given in another chapter.

The point at which the fatal imprisonment of the Erebus and Terror in 1846 took place, was only ninety miles from the limit reached by Dease and Simpson. Ninety miles more of open water, and Franklin and his heroic followers would not only have won the prize for which they had so bravely struggled, but have gained their homes to enjoy their well-merited honors. Such, however, was not to be the case.

"They were to discover the great highway between the Pacific and the Atlantic. It was given them to win for their country a discovery for which she had risked her sons and lavishly spent her wealth through many centuries; but they were to die in accomplishing their last great earthly task; and, still more strange, but for the energy and devotion of the wife of their chief and leader, it would in all probability never have been known, that they were indeed the first discoverers of the North-west Passage." The shores along which they fled are sacred to their memory, and bear the names of Franklin, Crozier, Fitzjames, Little, Irving, Gore, Hodgson, Fairholm, and other members of the lost expedition.

EXILES EN ROUTE FOR SIBERIA.

CHAPTER XXXIX.

ARCTIC SIBERIA AND ITS EXPLORERS.

SIBERIA, the entire northern part of Asia, was for centuries the battle-field of the Russians and Tartars, and its exploration may be dated from the period when the Russians freed themselves from the yoke of their conquerors. In 1580, a body of wandering Cossacks, searching for sable furs, crossed the Ural Mountains, and found a Tartar kingdom of which Sibir was the capital. A struggle ensued, the Russian power spread, and in less than one hundred years a few Cossack hunters had, by their exertions and the advantage which the possession of fire-arms gave them, added to Russia a territory larger in extent than all Europe.

Siberia is rich in mines, fossil ivory, and sable, but it is chiefly noted as being the great Russian penitentiary, to which criminals and all who have fallen under the displeasure of the government are banished. Many a wretched exile, the victim of state intrigues and despotism, has here dragged out a miserable existence; and hundreds of unhappy Poles, whose greatest crime was a devotion to their oppressed native land, have been perpetually banished to these dreary regions. The worst criminals are sent to the mines; the other exiles are furnished with small farm-

ing outfits and left to their own resources. They have contributed greatly to the improvement and civilization of the country, and many of them are contented, happy, and even wealthy in their compulsory homes.

The discovery of the shores of the Polar ocean, from Bering's Strait westerly to Nova Zembla (145 degrees of longitude) is due to the Russians. Those shores are, perhaps, the most desolate on the whole Arctic circle. The Siberian rivers—the Obi, the Yenisei, the Lena, the Indigirka and Kolyma—rise in the Altai mountains, and flow in their upper courses, through forests of tall trees. But, before they reach the Polar ocean, they traverse a dreary region of frozen swamp, which is barely habitable, called the *tundra*. Here the land is frozen for many feet below the surface. The rivers, during times of flood, bring down vast quantities of uprooted trees, which line their banks in immense masses, and are eventually carried into the Polar sea, to be drifted away with the current which flows from east to west along the Siberian coast.

The endeavors of the Russians to double the extreme northern points of Siberia—Capes Taimyr and Chelyuskin, the latter in 77° 30' N.,—have hitherto been unsuccessful. The Russians, in very early times, constantly went from Archangel to the mouth of the Obi, creeping along between the land and ice in the sea of Kara, and usually hauling their boats, or *lodias*, across the isthmus between Kara Bay and the Gulf of the Obi. In the last century several expeditions were sent by the Russian Government in the same direction, and vessels reached the mouth of the Pyasina, on the west side of the northern point of

Siberia, and the Khatanga on the east side. But no navigator has ever doubled that most northern cape of the Asiatic continent.

From the mouth of the Lena eastward, vessels have frequently reached the river Kolyma, but the doubling of the capes still farther east has been attended with great difficulty. Nijni Kolymsk, near the mouth of the Kolyma, was founded in 1644, by a Cossack named Michael Staduchin; and, in 1648, another Cossack named Simon Deshnef equipped an expedition there, consisting of three small craft which were broad, flat-bottomed, decked vessels, about seventy feet long, with both sails and oars. He rounded Cape Chelagskoi, passed through the strait afterwards named after Bering the explorer, and reached the Gulf of Anadyr. Most of his men died of hunger; but Deshnef himself succeeded in establishing a walrus fishery in the Anadyr.

Peter the Great desired that the whole northern coast of Siberia should be explored by sea, and he died a few days after giving his instructions to Captain Vitus Bering with his own hand, in 1725. Bering was a Dane, in the Russian service. He was despatched from St. Petersburg to the furthest point of Siberia with sailors and shipwrights, and two vessels were built at Okhotsk and in Kamchatka, the "Gabriel" and the "Fortuna." In July, 1728, he sailed from the river of Kamchatka, and examined the coast for some distance to the northward, ascertaining the existence of a strait between Asia and America. In September, 1740, Bering sailed again from Okhotsk, in a vessel called the "St. Paul," with another in company, called the "St. Peter," commanded by Lieut. Chirikof. George W. Steller embarked with Bering

as naturalist of the expedition. The two ships separated soon after sailing and did not meet again.

In June, 1741, they discovered the American coast, and that magnificent peak, named by Bering Mount St. Elias. The Aleutian Islands were explored, but scurvy broke out amongst the crews; Bering also was attacked by it, and in November his ship was wrecked on an island which was named after the ill-fated discoverer himself, who was carried on shore, and placed in a sort of pit or cavern dug in the side of a sand-hill. Here he was almost buried alive, for the sand was continually rolling down, and he requested that it might not be removed, as it kept him warm. In this miserable condition poor Bering died, December 8th, 1741.

Steller was naturally anxious to procure supplies of animal food for his scurvy-stricken patients, and he carefully examined into the natural history of the island. He attributed the cure of those who recovered, to the flesh of the sea-otter. Thirty of the crew died on the island, and the forty-five survivors escaped to Kamchatka in a little vessel built from the wreck of the "St. Paul." The most remarkable and interesting event of this voyage was the discovery by Steller of a rare and solitary species of manatee or sea-cow, called *Rytina Stelleres*. It has since been hunted and probably exterminated, for no specimen has been seen for more than seventy years. This creature had a sort of bark an inch thick, composed of fibres or tubes perpendicular on the skin, and so hard that steel could penetrate it with difficulty. It lived on sea-weed.

In 1734, Lieut. Muravief sailed from Archangel towards the river Obi, but was stopped by the ice

in the sea of Kara. In 1738, however, Lieut's. Malgyn and Shurakoff doubled the promontory with great difficulty and reached the mouth of the Obi. The next step was to sail from the Obi to the Yenisei. This was effected in the same year by Lieut. Koskelef. In the same memorable year for Siberian exploration, the pilot Menin sailed from the Yenisei towards the Lena, but was stopped by the ice at the mouth of the Pyasina, and returned unsuccessful.

Three years before, in 1735, Lieut. Pronchishchef made a similar attempt from the eastern side. He sailed down the Lena from Yakutsk, accompanied by his wife, but was hampered by ice, which only left a passage of two hundred yards along the coast, and was at last obliged to winter at the mouth of the Olenek. The following year he reached the mouth of the Khatanga, and pushed beyond it, but found himself at last closely beset near Cape Chelyuskin, his extreme northern point being $77^{\circ} 25'$. He and his wife died at the winter-quarters, near the mouth of the Olenek, and the command devolved upon Lieut. Chelyuskin who returned. In May, 1740, Lieut. Laptef found fixed and impenetrable ice in the same place, and returned convinced of the impossibility of sailing round Cape Taimyr. But in 1742, Chelyuskin reached the northernmost point of the continent in sledges, in latitude $77^{\circ} 34'$ N., doubled it, and returned to the mouth of the Taimyr. This cape is now known as Cape Chelyuskin.

After Bering's Strait, the most important discovery of the Russians during the last century was that of the Islands of New Siberia in the Polar ocean, opposite the coast between the mouths of the Lena and Indigirka. In March, 1770, a merchant named

Liakhof saw a large herd of reindeer coming over the ice from the north, which induced him to start with sledges early in April, to trace the tracks they had left. After a journey of fifty miles over the ice, he discovered three large islands, and the following year obtained the exclusive right from the Empress Catherine to dig for mammoth bones on them.

Immense alluvial deposits, filled with wood and the fossil bones of animals, are found throughout the shores of Arctic Siberia; but in the cliffs or "wood hills" of the New Siberia Islands these deposits are still more plentiful. For years after their first discovery the seekers for fossil ivory annually resorted to these islands; and, in 1821, the fossil ivory thus procured weighed twenty thousand lbs. Hedenstrom, a Russian officer, residing at Yakutsk, was employed by the Government to survey the New Siberia Islands in 1809, and occupied three years in their exploration. He reported, in 1810, that, to the northward of these islands during three years, he was always stopped at a short distance from the land by weak ice.

In March, 1821, Lieut. Anjou, afterwards Admiral, went across the ice with dog sledges, to the Kotelnoi Island. He then traveled over the ice to the northward in April, and saw vapor rising to the north-west when at a distance of forty-two miles from Kotelnoi (lat. $76^{\circ} 38'$), which led him to suppose that there was open water in that direction. But Wrangell tells us that when the ice cracks, even in places where it is thick and solid, vaporization immediately ensues, which is more or less dense according to the temperature of the atmosphere.

In March, 1823, Anjou again crossed to the New

Siberia Islands. Open sea, with drifting masses of ice, was seen on the 26th, the ice drifting from east to west. The frequenters of the islands believe this current to be the ebb tide. On the 9th of April he started over the ice to the eastward, and met with thin ice on the 14th, at a distance of sixty miles; but lines of impassable hummocks obliged him to make for the mainland.

Anjou arrived at the conviction that all efforts to advance by the ice to any considerable distance from land would prove unavailing, owing to the thinness of the ice and to the open water within twenty to thirty miles of the islands. His expedition, however, effected a complete survey of this interesting group. The sea between the islands and Siberia is not completely frozen over until the end of October, and the coasts are free by the end of July. Throughout the summer the sea is covered with fields of ice, drifting to and fro with winds and currents.

While Anjou was conducting these explorations, Wrangell was prosecuting similar researches from his head-quarters at Nijni Kolymsk, near the mouth of the Kolyma, to reach which place he had traveled overland from St. Petersburg, a distance of nearly five thousand miles. On the way he passed through Yakutsk, a flourishing city of four thousand inhabitants, situated on the Lena River, and a commercial center of the fur and ivory trade. Its dwellings consist chiefly of Yourts, with turf-covered roofs, doors of skins, and windows of ice. During the month of January the thermometer stands on an average of 45° below zero. According to Sir Edward Brewster, Yakutsk is near the "Asiatic pole of cold," one of the two coldest points on the globe.

Wrangell made four journeys on the Polar Sea, accomplished in dog sledges called *narti*. The runners are of birchwood, and the upper surface of the sledge of willow shoots woven together. All the parts are fastened together with hide thongs. When in use the sledges are turned over, and water is poured on the runners to produce a thin crust of ice, which glides easily over the snow, and the icy runner is called *wodiat*. As spring advances it of course becomes useless, and whalebone is sometimes substituted.

Wrangell considered March to be the best time of the year for sledging, when it is easier work for the dogs. A well-loaded sledge required a team of twelve dogs, which were fed on frozen herrings. The men wore reindeer-skin shirts, great leathern boots lined with fur, a fur cap, and reindeer-skin gloves. The party had a conical tent of reindeer-skin, with a light framework of six poles; and, when they encamped, they lighted a fire in the centre of it, and were half smothered. Each man slept on a bear-skin, and a reindeer-skin coverlet was provided for every two.

In his first journey, during March, 1820, Wrangell explored the coast from the mouth of the Kolyma to Cape Chelagskoi. His second journey was undertaken in order to see how far he could go over the ice to the northward away from the Siberian coast, and he started March 27th, 1821. At a distance of two miles from the shore, the party had to cross a chain of high and rugged hummocks five miles wide, beyond which there was an extensive plain of ice. Wrangell continued to advance to the northward for a distance of one hundred and forty miles, when he found the ice to be very thin and weak, owing to large patches of brine that were lodged on the snow. There were

cracks in every direction, through which the sea-water came up, and the ice was scarcely a foot thick. It was therefore deemed prudent to commence a retreat on the 4th of April.

In approaching the coast again, they had to cross ranges of hummocks of greenish-blue colored ice, often eighty and ninety feet in height, denoting tremendous pressure during the winter. Wrangell returned to Nijni Kolymsk April 28th, after an absence of thirty-six days, during which time he had traveled over eight hundred miles. He was much struck during this journey at the wonderful skill displayed by the sledge-drivers in finding their way by watching the wave-like stripes of snow, formed by the wind, which are called in Siberia *Sastrugi*. The ridges always indicate the quarter from which the prevailing winds blow. The inhabitants of the *tundras* often travel over several hundred miles with no other guide than these *sastrugi*. They know by experience at what angle they must cross the greater and lesser waves of snow, in order to arrive at their destination, and they never fail. It often happens that the true, permanent *sastrugi* have been obliterated by others produced by temporary winds; but the traveler is not deceived thereby; his practised eye detects the change, he carefully removes the recently drifted snow, and corrects his course by the lower *sastrugi*, and by the angle formed by the two.

On his third journey Wrangell started northward from the coast March 16th, 1822, chiefly with the object of ascertaining the truth of a native report that there was high land in that direction. After traveling for many days over very difficult hummocks, the party came to such weak ice, broken up by so many

cracks, that Wrangell supposed the open sea must be at hand, and deemed it prudent to return, when one hundred and seventy miles from the land. On this journey he traveled over nine hundred miles.

Wrangell's fourth and last journey was commenced March 14th, 1823, and Cape Chelagskoi was reached on the 18th. A Tuski chief here informed him that, from an adjacent part of the coast, on a clear summer's day, snow-covered mountains might be descried at a great distance to the north, and that herds of reindeer sometimes came across the ice of the sea, probably from thence. The natives concur in stating that Cape Jakan is the nearest point to this northern land. The party struck off across the ice to the northward when they had gone a little beyond Cape Chelagskoi; but a violent gale of wind cracked and broke up the ice, which was only three feet thick, placing them in considerable danger. As they advanced it became thinner, and they only succeeded in crossing the cracks, just frozen over, in safety, owing to the incredibly swift running of the dogs. Wrangell was obliged to turn back at a distance of seventy miles from the land, and in reaching it they had to ferry themselves across many cracks, on pieces of ice, the dogs swimming and towing. To the west the sea appeared completely open, with floating ice, and dark vapors ascending from it obscured the horizon. Lanes of water were opening in all directions, and, without a boat, the little party was placed in a position of extreme danger. A gale of wind dashed the pieces of ice against each other with a loud, crashing noise, and split many of the floes into fragments. The dogs saved them. They dashed wildly and swiftly towards the land, and reached it on the 27th.

Wrangell continued the coast survey for some time longer, and returned to Nijni Kolym'sk May 10th, after an absence of seventy-eight days, having traveled over fifteen hundred and thirty miles. Thus ended the series of attempts to reach the unknown northern land, which, though not seen by him, Wrangell still thinks may possibly exist. It was sighted by Captain Kellett, and afterwards, in 1867, by Captain Long, an American whaler, who approached from Bering's Strait; and it is now marked on the maps as Wrangell Land. On Wrangell's map it is stated that the mountains are visible, from Cape Jakan, in clear summer weather.

In 1843, Middendorf was sent to explore the regions which terminate in Cape Taimyr, by land. He descended the river Khatanga, and reached the Taimyr lake in June. In August he arrived at the shores of the Polar Sea, and sighted Cape Taimyr, whence he saw open water, and no ice-blink in any direction. He found the rise and fall of the tide to be as much as thirty-six feet. His visit was, however, in the very height of the short Arctic summer.

The observations of Hedenstrom, Anjou, and Wrangell, have led Russian geographers to the conclusion that there is a part of the Polar ocean always an open sea, extending from some twenty miles north of the New Siberia Islands to about the same distance off the coast of the continent between Cape Chelagskoi and Cape North. This opinion rests on the instances in which these explorers, in March and April, encountered either open water covered with loose floes or very thin ice, indicative of its immediate vicinity, at different points of this line. Wrangell considered that the fact of the northerly winds being

sufficiently damp to wet the clothes of his party, was a further corroboration of the existence of an open sea in that direction. In summer, the current along the Siberian coast is from east to west, and in autumn from west to east. On the breaking up of the ice in the great Siberian rivers their waters help to drive the floes from the coast, and the westerly current then carries them in heavily-packed masses towards the Atlantic, and millions of tons of ice are thus sent to swell the size of the polar pack, and are annually melted between Greenland and Nova Zembla.

Wrangell, using an allowable poetical license, has called the open water off the Siberian coast "the wide immeasurable ocean;" and ever since the "great Polynia of the Russians" has been a phrase on which geographical theorists have founded the wildest speculations. Now, in all parts of the Arctic regions the ice is more or less in motion during the summer, so that the observation of open water by Middendorf, near Cape Taimyr in August, is nothing remarkable.

There can be no reason to doubt that, owing to strong currents and gales of winds, the ice is in motion off the coast of Siberia very early in the spring, giving rise to polynias, or lanes and pools of water; but there is nothing in the observations of the Russian explorers to warrant the belief in a "wide immeasurable ocean." The rising vapor, so often mentioned by Anjou, is caused by tidal cracks in the ice, and is no proof of an open sea; and the phenomena of damp winds and rotten ice betoken just what Anjou saw—a limited expanse of sea, covered with drifting floes. There is no evidence whatever that the Siberian Polynia of the early spring is of greater extent than the prevalence of gales of wind and currents would easily explain.

The latest Russian exploring achievement in Siberia has been the examination, in 1866, of the mouth of the Yenisei, by Herr Schmidt, made in consequence of the alleged discovery of a mammoth skeleton in the vicinity of the lower Yenisei River. An interesting fact in connection with this river, is the immense quantity of drift-wood lying on either side of its banks. About the low lands of the estuary the wood lies scattered about, and, mixed with loam and sand, forms the chief component of the numerous islands studded about the mouth. In many places peat-moss is to be found, and stems of trees, which prove that vegetation formerly spread further north than now. Here, as well as in most parts of Siberia, the larch (*Larix Sibirica*) marks the commencement of forest growth.



CHAPTER XL.

TRAVELS IN ALASKA.

THE territory of Alaska, purchased by the United States in 1867, is a wide and interesting field for discovery. Visited occasionally for two centuries by navigators and traders, little more was known of it in the civilized world than the outline of its coast; but its annexation to our country has turned our attention to it, and caused more accurate details of its characteristics and resources to be brought within our reach.

This vast domain, for which the Russian Government received some seven million dollars, contains 500,000 square miles, a large proportion of which is uninhabited and uninhabitable. The southern part is peopled by Esquimaux, Indians and Russians, and has natural productions of much value. Its forests and mineral wealth are much like those of the neighboring British territory. There are important cod-fisheries along various portions of the coast; and salmon abound in all the rivers. The fur-trade has always been great, and if protected by proper laws may continue to be a source of wealth to its owners.

The Aleutian Islands comprise a valuable portion of the Alaskan purchase, and besides some commercial importance have many points of interest, including

TRAVELING IN KANGUATKA.

ALEUTIANS CATCHING WHALES.

geysers, hot springs, and volcanoes. The natives have a curious way of capturing whales. They surround one with boats, and throw into him so many harpoons, to which bladders filled with air are attached, that he is obliged to float on the surface, and is then easily killed with lances.

Much of our information respecting the interior of Alaska, was gained by William H. Dall and Frederick Whymper, who traveled there in 1866, under the auspices of the Western Union Telegraph Company. The object of the exploration was to find a suitable route for a telegraph line from Bering's Strait to San Francisco, which was to be a part of an inter-continental line, in case the Atlantic cables should fail.

The Yukon River which the explorers ascended six hundred miles, is one of the greatest streams in the world. The Amazon, the Mississippi, and perhaps the La Plata, alone surpass it. For a distance of seventeen hundred miles from its mouth, its average width is more than a mile, and while it courses through the centre of Alaska, it rises far to the south in British America, near the sources of the Mackenzie. The larger portion of it is frozen over during eight months of the year, but in summer it is navigable far above Fort Yukon. Its course in Alaska is mainly toward the west, but at Nulato, the most northernly trading-post of the Russians, it turns and flows toward the south, and falls into the sea just south of Norton's Sound.

Mr. Whymper was accompanied by five white men and three Indians. They were equipped with four sledges and twenty dogs. These dogs were not of the best kind, but had many characteristics of the

wolf. Their food was mostly fish, but they would eat anything that afforded nutriment.

The party started from Unalachleet on Norton's Sound, soon after the late sunrise of Oct. 27th. The temperature was 2° above zero; but the snow was still loose, and the rivers not yet thickly frozen, so that their progress at first was slow and tedious.

At noon on Nov. 11th, after an overland journey of one hundred and seventy miles, they saw before them a broad and level expanse of snow, which marked their arrival at the Yukon River. Reaching soon after the Indian village of Coltog, they rested there two days. The houses of this village were underground, with an entrance by a short shaft and tunnel. In the roof, which was arched above ground, was the only other opening—a hole for the escape of smoke from the fire. The dogs enjoyed the warmth of the dome, and sometimes fell through to the fire below. When the fire was burnt out, and the smoke-hole was covered with a skin, in order to retain the heat, there was no ventilation and the scents were manifold and abominable.

The party set out again on the 14th. The river wound about so much that they crossed it several times to escape long curves. Their way was greatly obstructed by masses of ice rising in irregular heaps; but even this track was preferable to that on land, for in the forests the dogs would constantly run the sledge against stumps, and wait for the men to free it, and in descending hills the sledge would overtake the dogs, tangle their harness, and run over them.

After a day's journey of twenty-five miles, the travelers encamped in an empty Indian house. They arose early the next morning, and after going on some

PORT MULATO, ALASKA--AURORAL LIGHT.

seven miles, met a train of sledges with Russians and Indians, who, turning back, went with them to Nulato. Here their quarters were clean and comparatively comfortable. The trading-post is on the north bank of the Yukon, on a flat stretch of land, at the mouth of a considerable tributary. There are large trees for building purposes, a rich soil, and in the short summer, luxuriant grass and innumerable berries. Water is brought on a sledge from a hole in the ice of the river a quarter of a mile from the post; and by wicker-baskets let down in the water through the ice, large quantities of fish are caught.

The coldest day was December 5th when the thermometer stood at 58° below zero. Yet the men did not feel the severity of cold, for the wind did not blow; whereas a slight wind, when the temperature was only a few degrees below zero, seemed to search out every little seam or tear in their clothing, and cause special suffering to "nose, ears, and angles generally." The shortest day, December 21st, enjoyed only an hour and fifty minutes of sunlight. Christmas was celebrated with such a feast as the circumstances allowed. Fine Auroral lights, the sports of hunting and fishing, trading, and amateur theatricals, diversified the winter sojourn at Nulato.

Early in April indications of summer were seen. On the 9th flies appeared; on the 10th the willows were seen budding; on the 28th the first goose arrived from the south. The river began to thaw May 5th, and broke up on the 19th; masses of ice rushed past for several days, and on the 24th the stream was mostly clear. The Russians were now ready for a trip to an Indian trading-place two hundred and forty miles up the stream. They had a

large skin boat, fitted with rudder and sails, and capable of carrying two tons of goods and provisions. The Americans accompanied them with a smaller boat and a cargo of about seven hundred pounds. These vessels would recover from a collision with snags or ice which would sink vessels made of bark.

The summer came on apace. Ice lingered in the river till May 27th, but on June 5th, the thermometer at noon stood at 80° in the shade, and the heat compelled the men to lie by for a time.

At the Indian village referred to, the Russians stopped, and Mr. Whymper's party presently journeyed on. Moose hunting was common in portions of the river. The days were extremely long, and there was no light but the twilight. Fort Yukon was reached on June 23d, the party having traveled six hundred miles in twenty-nine days. The Fort is a trading-post of the Hudson's Bay Company, who buy the privilege of holding it within the bounds of Alaska. The most striking scene at this place is the fur-room, in which can be seen thousands of marten-skins hanging from the beams, and huge piles of common furs.

On the 8th of July, the party began to descend the river. The current bore them on at the rate of a hundred miles a day. They landed only two or three times a day to prepare their tea and fish, and making six hundred miles in about six days, arrived at Nulato. Here, receiving orders to return to St. Michael, they went on down the river. The region below Nulato is poorer in vegetation and is seldom visited by travelers. The northern or Aphoon mouth is the easiest navigated, and through it the travelers reached the sea, having come from Fort Yukon thirteen hundred miles in fifteen and a half

DEER CORRAL, NORTHERN ALASKA.

days. Two days more of sailing brought them to St. Michael.

The Co-Yukon Indians living near the Yukon above Nulato, are more savage than most tribes, and lightly value human life. Tombs at Nulato still mark the massacre of forty Indians and part of the guard in 1851. The dead are interred in oblong boxes raised on posts, and are mourned by the women for a year. The people superstitiously save bones of animals, thinking that if they were given to the dogs or burned, their fishing and hunting could not be successful. They catch reindeer by driving them into an enclosure, whose sides are made of stakes with loops between them, where they are shot. Intemperance is almost unknown among these Indians. They barter furs for porcelain beads, combs, looking-glasses and knives. In the spring they all wear wooden goggles when hunting or traveling, to shield their eyes from the blinding glare of the snow; narrow slits before the eyes give sufficient light for sight.

The Co-Yukon dialect has no resemblance to the language spoken at the coast, but resembles that of some of the tribes of north-eastern Asia, where these Indians probably originated. The Yukon tribes are more nearly allied to the true North American Indian.

Sitka, or New Archangel, the capital of Alaska, is situated on an island discovered in 1741 by Tschirikoff, the companion of Bering. Formerly it was exclusively the head-quarters of the Russian American Fur Company, and the residence of the governor, who was the autocrat of all the Russians in America. It is now a town of considerable importance.

CHAPTER XLI

DR. HAYES' EXPEDITION.

THE name of Dr. Isaac I. Hayes is already familiar to the reader and to his countrymen. A native of Pennsylvania, immediately after his graduation at the University of Pennsylvania, at the early age of twenty-one, he joined the Second Expedition of Dr. Kane as surgeon and naturalist. Of the important services which he rendered this expedition, Dr. Kane has left ample testimony. The two men warmly sympathized, and by sharing each others trials and labors lightened their mutual burdens. When by mutual consent, a portion of the crew of the *Advance* left that vessel to attempt to reach the Danish settlements of Lower Greenland, Dr. Hayes led the withdrawing party, which was obliged to return to the brig after penetrating some distance southward.

Undaunted by the perils and hardships of his first voyage, or by the untimely death of his late commander, Dr. Hayes was full of zeal for another expedition. His faith was strong that he could live in the Polar regions as well as the Esquimaux, and could even penetrate to the North Pole. It was difficult to inspire others with the same zeal and faith. His friends and the public generally, received his propositions coolly. The game did not seem worthy

VIEW OF SITKA, ALASKA.

of the chase. The many lives already lost, the many sufferings endured, and the vast property sacrificed in the Arctic Seas without commensurate results, were certainly not encouraging for future operations.

Not so thought the doctor. After having experienced the rigors of the Frigid Zone for two long winters, he was satisfied that white men could live there permanently, relying solely on the supplies which the country furnished for support. His faith and perseverance were finally crowned with such a degree of success that his friends, after five years of importunity, fitted him out with a small schooner, which he may be said to have argued into being; for he went around the country lecturing on his favorite project and would not be denied.

The schooner, *Spring Hill*, was at length purchased, her name changed to "*United States*" and Dr. Hayes placed in command. The plan of the expedition was his own, and may be best stated in his own words: "My object was to complete the survey of the north coasts of Greenland, and to make such explorations as I might find practicable in the direction of the North Pole."

Full of hope and in the highest spirits, Dr. Hayes and his little party set sail from Boston, July 7th, 1860, steering directly for the outer capes of Newfoundland; and so prosperous was the voyage that the "*United States*" reached the bold promontory of Swarte Huk within the Arctic Circle, Aug. 2d. Here she was becalmed; and Dr. Hayes' graphic pen gives this beautiful description of the scene here witnessed:—

"The air was warm, almost as a summer's night at home, and yet there were the icebergs and the bleak mountains with which the fancy, in this land of green

hills and waving forests, can associate nothing but cold repulsiveness. The sky was bright and soft, and strangely inspiring as the skies of Italy. The bergs had wholly lost their chilly aspect, and glittering in the blaze of the brilliant heavens, seemed in the distance like masses of burnished metal or solid flame. Nearer at hand, they were huge blocks of Parian marble, inlaid with mammoth gems of pearl and opal. One in particular exhibited the perfection of the grand. Its form was not unlike that of the Coliseum, and it lay so far away that half its height was buried beneath the line of blood-red waters. The sun, slowly rolling along the horizon, passed behind it, and it seemed as if the old Roman ruin had suddenly taken fire."

After several narrow escapes from nips and icebergs, the "United States," was compelled to take up her winter-quarters at Port Foulke on the Greenland coast, about twenty miles south of Rensselaer Harbor. The neighborhood abounded with game, and to this fact and to the great good cheer which reigned on the schooner, the crew were indebted for the uniform good health which they enjoyed during the winter. The dogs were not so fortunate. These pined away and died during the long night as they did on Kane's expedition. Dogs have not the consolations of hope, and cannot endure the artificial life of ship-board as well as men.

Fortunately the Esquimaux were able to furnish some fresh dog teams, and early in April, 1861, Dr. Hayes started out into the icy wilderness. The Greenland shore proving perfectly impassable, he resolved to cross over the sound to Grinnell Land and try to ascend that coast. Of the difficulties encountered no

one unacquainted with Arctic travel can form any adequate idea. They were enough to appall and discourage at the start even the strongest and most resolute of travelers.

After toiling on for twenty-five days, Hayes found that he was not half way over the sound and that his men were breaking down from fatigue. Selecting therefore three of the most robust and courageous, Jensen, McDonald and Knorr, he sent the remainder back to the schooner, and with these and fourteen dogs, he boldly pressed on to Grinnell Land, which he reached in fourteen days.

The journey along the coast was little less fatiguing, and he had advanced only five days when Jensen, the strongest man in the party, gave out utterly exhausted. Leaving him in charge of McDonald, Dr. Hayes pushed on with Knorr for his only companion, and, May 18th, reached a deep bay where rotten ice and wide seams put a veto to further progress. He had the satisfaction of seeing on the opposite side of the bay Mount Parry, and farther on Cape Union—then the most northern known land. The return to Port Foulke was safely accomplished.

The schooner having been released from the ice, Dr. Hayes made an effort, July 12th, to sail across to Grinnell Land; but finding his little vessel too crippled to force her way through the pack ice, he was compelled to head her for home, where he arrived in October.

Dr. Hayes subsequently published a very interesting history of his expedition in a book called "The Open Polar Sea." He has still faith that there is such a sea, and that it can be navigated. No man living is better qualified to lead the way thither.

CHAPTER XLII.

CAPTAIN HALL'S FIRST TWO EXPEDITIONS.

CHARLES FRANCIS HALL whose life of adventures and self-denial has closed under circumstances which command for him the admiration and sympathy of his countrymen, was a native of New England, born in 1821. He received but a limited education, learned the trade of a blacksmith, and followed that business for several years. Subsequently he migrated to Cincinnati, Ohio, where he appears to have engaged in various pursuits. He had a taste for scientific study and inventions, and was at one time greatly interested in caloric engines. Engaging in the manufacture of engraved seals he acquired skill as an engraver and draughtsman. Connected with this business he dealt in stationery, and published an advertising sheet called "*The Occasional*." From his experience in this incipient journalism he was emboldened to start "*The Penny Press*," which under his successors acquired a large circulation.

The fate of Sir John Franklin was about this time exciting the interest of the world, and the subject of Arctic discovery next absorbed Hall's attention. He carefully watched all the various expeditions sent out for Franklin's relief, and finally felt a desire to join in the search. With this object in view he began to

fit himself for a life in the Frozen Zone, by sleeping under a tent at Mount Adams during the winter months.

The tidings brought by McClintock led Hall to believe that some of Franklin's men were still alive and could be found; and it seemed to him as if he was "called" to try and do the work. So he decided to do it. After laying his plans before his Cincinnati friends, he went to New York, interested Mr. Grinnell in his scheme, and at a meeting of the Geographical Society, introduced himself as a man who "wanted to go and find the bones of Sir John Franklin."

Mr. Hall was not in any sense of the word a scholar, nor was he a navigator; he was a plain unobtrusive man, and measured by the current conventionalisms, would have made a poor figure in a company of gentlemen. But he was endowed with a physical constitution of exceptional vigor and endurance; able to meet all conditions of life, whether among people civilized or savage; and possessed of a vast deal of patience, good nature, and kindness of heart.

His first expedition north was a singularly modest one, and its plan was unique. He did not propose to break through the ice of unknown frozen seas; but to be set down alone on the shores contiguous to the waters where whales are found, and thence, with Esquimaux guides, to find his way to King William's Land, where he believed, among a people so primitive, the traditions of Franklin's fate would certainly survive.

Various articles of outfit and about one thousand dollars were donated by friends of the undertaking; Williams and Havens of New London offered to

transport the traveler and his outfit free of charge in one of their whaling-ships; and on the 29th of May, 1860, Hall sailed in the "George Henry," commanded by Capt. S. O. Buddington and bound for the Arctic whaling-grounds. A small schooner, the "Ameret," formerly the "Rescue" of Kane's first expedition, sailed with the George Henry as a tender. An Esquimaux named Kudlago, who had come to the United States with Buddington, and on whom Hall greatly relied for assistance, died on his passage home; his last words were "Do you see ice?"

After touching at Holsteinberg, Greenland, Buddington crossed Davis' Strait, and on the 17th of August, anchored his vessel in a small bay just north of the entrance to Frobisher's Bay. Here and in this neighborhood the whalers commenced operations, and Hall began his acquaintance with the natives who were scattered along the coast. On the 18th of September, Capt. Tyson arrived in the Georgiana, and Hall relates instances of the kind and unselfish disposition which he manifested, while competing with Buddington's men in catching whales. Soon afterward a fearful gale came on, during which the Rescue was wrecked; the Georgiana was driven ashore and narrowly escaped; and a large whale-boat belonging to Hall, in which he expected to make long trips, was destroyed. The George Henry escaped, but was wrecked on her next voyage about two years later.

In November, Hall made the acquaintance of Ebierbing, a noted hunter and pilot, and Tookoolito his wife. They were of the Esquimaux or "Innuits" aristocracy, had visited England, could speak the English language, and the lady's voice was "low and sweet." They became attached to Hall, were his

constant guides and companions, went with him to the United States on his return, accompanied him in his subsequent journeys, and are now better known as "Joe" and "Hannah."

The George Henry remained safely in her quarters through the winter, and was not released from her icy fetters till the 17th of July, 1861; but even then, intervening ice prevented Buddington from reaching open water where he wished to cruise for whales.

Meantime Hall had been much ashore, making short journeys along the coast and living in the huts of the natives to acquire their language and habits of life. He now planned a longer trip, and on the 9th of August, left the George Henry in a whale-boat rowed by six natives to explore Frobisher's Strait. He returned to the ship on the 27th of September, and in reply to his first question,—“How many whales secured?” was informed, “Not one.” Such is the “fisherman's luck” which sometimes attends our whalers.

In this excursion Hall ascertained that Frobisher's Strait is in fact a bay; and it is touching to see the value which, in the absence of more important geographical discoveries he placed on this achievement. He was also greatly elated at finding what he supposed to be relics of Frobisher's Expedition—coal, iron, etc.; these simple memorials not only brought back the presence of those stalwart and adventurous Englishmen who visited the “*Meta Incognita*” three hundred years before, but gave to him a sense of companionship in his lonely ramblings over its desolate wilds. He also found a tradition of this early expedition alive among the natives. There had been handed down to them the memory of white men who had come in ships and lived for a while among them;

and this fact confirmed Hall in his impression of the value of tradition, through which, in the absence of literature, important historical events like the wreck of Franklin's ships, were not lost among them.

The researches of Hall during this expedition were confined to a small extent of territory laying several degrees below the Arctic Circle; but it would be unjust to estimate his services by the limit of latitude which he reached. His experiences enabled him to become a competent authority in matters pertaining to the inhabitants of the region, and he has thrown much light upon their customs and mode of living. In eating they are gluttons of the highest order. Hall seems to have kept himself from their excesses, but to have fully endorsed their tastes, and he is often emphatic in eulogizing their abominable dishes.

Although the Innuits are kind and hospitable to each other when all are living and well, they are singularly stony-hearted towards the sick and dying. Especially to their women this coolness is most mournful. When one of the poor creatures seems nigh to death, they leave her alone in one of the snow-houses, putting near her a few of the articles which are most necessary for life, and then remain in other houses, abstaining from labor, till the poor sufferer passes away. Hall tried to set the example of Christian kindness to them in caring for the sick; but almost in vain. The Esquimaux are a singularly conservative people, and whatever their ancestors did, they think they must do. To any remonstrance against their habits they used always to answer, "The old Innuits did so;" and that settled the matter.

Captain Buddington intended to start for home in the fall of 1861, and all were greatly disappointed

when it was found, very unexpectedly, that heavy pack ice was already drifting down across the entrance of the bay. "Our fate is sealed," said Buddington; "another winter here; we are already imprisoned."

Another long winter was passed by the *George Henry* and her crew at Field Bay. As provisions were short on the ship, portions of the men were quartered upon the natives, but generally found the privations of Innuît life harder to bear than a short allowance of food on the vessel. One man froze his feet so badly that Buddington was obliged to amputate his toes, which he did skillfully. Others of the crew arrived at the ship nearly dead with hunger. One who got lost was searched for by Hall and Buddington and found dead on the ice.

On the 8th of the succeeding August, the *George Henry* again floated free, and the next day started for home. Hall was accompanied by his Esquimaux friends, and their infant boy Tukeliketa who died soon after his arrival in the United States.

After a stay of nearly two years in his native country, Captain Hall again started north, July 30th, 1864, to renew his acquaintance with the Innuits. With Joe and Hannah he took passage in the *Monticello*, Captain Buddington, and the party was landed on the northern coasts of Hudson's Bay. Of his five years' residence in this region, little is known; although he was most of the time in communication with whaling-ships, and received from them such supplies as he needed. He penetrated north as far as Hecla and Fury Strait, visited King William's Land, and returned to the United States in 1869.

In a letter to Henry Grinnell written at Repulse Bay, June 20th, 1869, Captain Hall gives the follow-

CHAPTER XLIII.

THE POLARIS EXPEDITION.

ON Capt. Hall's return from his second residence among the Esquimaux, he wisely concluded that a seven years' search for relics of Sir John Franklin, whose fate had previously been pretty definitely ascertained, had exhausted that field of Arctic adventure, and he turned his attention to the project of a scientific expedition toward the North Pole under Government auspices. His persistent efforts to arouse a national interest in the enterprise were at length successful, and Congress appropriated \$50,000 for defraying the expenses of an expedition to be sent out in a government vessel under his command.

Captain Hall's plans of operation, as stated by him in a lecture given in December, 1870, and reported in the *New York World*, were in part as follows:—

“Crossing Baffin's Bay, he will go to Smith's Island, and from thence westward through Jones Sound, following it for about two hundred miles; then, after getting that distance, he will turn to the north, and go as far as practicable before winter sets in, and hopes to get as far as 80°. There he will winter, and in the spring of 1872, with all his preparations complete, he will start on a grand sledge journey to the pole.

“He believes that in sledge traveling he is an adept. The natives are very expert in those matters; but he thinks he has improved somewhat on them. He has gone through a full course in the Arctic college, and thinks he has little to learn in the matter of sledge traveling. This journey, he expects, will occupy from ninety to one hundred days, relying entirely for support on the provisions obtained on the way. He will take with him on this journey about half of his crew, leaving the rest to subsist on whales, seals, and walruses, or anything else they can obtain.

“Every man in his party will be a picked man. His sailing master has had twenty years' experience in the Arctic Seas, and has full faith in him and the enterprise. His first and second officers have each had ten years' Arctic experience.

“All of his crew will be trained to live as the Esquimaux do, and then they can stand the cold; but they must eat raw meat, and stick to train-oil. He (Captain Hall) has eaten in one day fifteen pounds of raw meat, washed down with two and a half pints of train-oil. While men thus live they can defy King Cold. A whale in those regions is a Godsend; one whale is equal to 600 oxen, and affords the best eating that he has ever enjoyed. In fact, he has always enjoyed his food better in the Arctic regions than anywhere else; and even here among civilized people the old longing for raw meat comes on him so strong sometimes, that he goes away to his closet where no one can see him and has a good feed of raw meat. And there is a virtue in it which it loses when cooked.”

The steamer *Periwinkle* having been designated for the service, was rechristened the *Polaris*—the

Latin word for North Star,—and under the supervision of Capt. Hall was fitted up at Washington in the most thorough manner. The vessel was rigged as a top-sail schooner and her measurement was 400 tons.

The Polaris steamed out of New York harbor on the afternoon of June 29th 1870, having on board the following persons:—

Charles Francis Hall, Commander.

Dr. Emil Bessels, Zoologist.

R. W. D. Bryan, Astronomer and Chaplain. F. Meyer, Meteorologist.

Sidney O. Buddington, Sailing-master.

George E. Tyson, Ass't Navigator.

Hubbard C. Chester, First Mate.

William Morton, Second Mate.

Emil Schumann, Chief Engineer.

A. A. Odell, Assistant Engineer.

W. F. Campbell, John W. Booth, Firemen.

John Heron, Steward; William Jackson, Cook; Nathan J. Coffin, Carpenter.

Hermann Siemons, Frederick Auting, J. W. C. Kruger, Henry Hobby, Joseph B. Manch, Gustavus Linguist, Peter Johnson, William Nindeman, Frederick Jámka, Noah Hayes, Seamen.

Joe, Esquimaux Interpreter and Hunter; Hannah, Interpreter and Seamstress; Punna, adopted daughter of Joe and Hannah.

Dr. Bessels was a German savant, who had acquired Arctic experience in a voyage to Spitzbergen. Meyer, a native of Prussia, had been detailed from the U. S. Signal-service Bureau to accompany the expedition. Morton was well known as the discoverer of the "Open Polar sea;" he accompanied Kane on his two Arctic voyages, and was with him in Havana at the time of his death.

Captain Buddington, was a sailor of great experience having followed the sea from boyhood. At the age of thirteen he acted as cook on a fishing smack in the Gulf of Mexico; afterwards he caught mackerel, and cod-fish in more eastern waters, and while yet a boy went on a whaling ship to the Southern Pacific. When the ship was ready to go home, he joined an empty whaler which had just come to the fishing-grounds, and returned as her mate, having been absent from home for a period of six years.

When Buddington sailed again it was as master of a whaling vessel, and he had followed that business ever since, making eleven voyages to the Arctic seas, extending over a period of twenty-three years. He commanded the "John Henry," the ship which gave Hall a free passage outward and homeward on his first journey to the North, and had ever been on friendly terms with the explorer.

Hall knew Buddington well, having spent much time at his home in Groton, Conn., where he was always welcome as an old friend of the family. In his published book he speaks of him as "my noble friend," and relates several circumstances which go to show that he considered Buddington to be what he doubtless was, a brave, capable and humane man, unsurpassed by any one as a safe Arctic navigator.

It was these qualities which led Captain Hall to select Buddington as navigator of the *Polaris*. It is said that he at first reluctantly consented to go, as he had not much interest in an expedition made, as he considered, for no practical purposes; but the large pay offered, costly presents, the promise of a pension to his wife in case of his death, and the chance for fame if the voyage proved successful, succeeded in fascinating him, and he sailed with the expedition.

Captain Tyson, too, was an old whaler and had been on several voyages. He had resided in New London since 1853, and Hall had there consulted with him in reference to his first journey north. Soon afterward he sailed as master of the *Georgiana*, and this ship and the *John Henry* anchored for a while in the same Greenland harbor, where the acquaintance was renewed. When Tyson made his first trip to sea, Buddington was mate of the vessel in which he sailed.

Tyson supplied Captain Hall with provisions and a boat at Repulse Bay in 1865. He sailed in the *Polaris* at the urgent request of Hall, without any stated office, but his appointment as assistant navigator was sent on by the steamer *Congress* and reached him at Disco.

Joe and Hannah were the American names of Hall's Esquimaux friends Ebierbing and Tookoolito, who, since their second arrival in the United States, had been living in Groton near the residence of Captain Buddington. Mr. Chester, the first mate of the *Polaris*—an enterprising, reliable, and very capable man—was also a resident of Groton.

A reception of Captain Hall and his officers by the American Geographical Society of New York, came off at the rooms of the society three days before the departure of the *Polaris*. An address was made by the president of the society, Hon. Charles P. Daly, and Mr. Henry Grinnell presented a flag to Captain Hall, in the following speech:—

“This is quite a noted flag, and has seen peril by sea and ice. In 1838 it went with Wilkes' expedition to a higher latitude toward the Southern Pole than any American flag ever went before. In 1850 the flag was presented to me by Lieutenant Walker, who took it to the Southern regions, with the request that I would loan it to De Haven. He took it to a higher latitude in the Northern regions than any other flag had ever been. Dr. Kane took it, with another expedition, to a still higher northern latitude. When Dr. Hayes went on his expedition I loaned it again to him, and he carried it about thirty-seven miles higher than an American flag had ever been before.

"Now I give it to you, sir. Take it to the North Pole, and bring it back a year from next October."

Captain Hall on receiving the flag said:—

"I really feel from the bottom of my soul that this flag, in the spring of 1872, will float over a new world; a new world, in which the North Pole star is its crowning jewel."

Captain Hall also made an address, in which he spoke of the Arctic regions as his home, which he loved dearly, among whose storms, winds, glaciers, and icebergs he seemed to be in an earthly heaven or a heavenly earth. He said that he had chosen his own men, and that they would stand by him through thick and thin to the last extremity. He gratefully acknowledged the assistance which he had received while planning and preparing the expedition, and complimented the 41st Congress as follows:—

"I called upon the congressmen, republicans and democrats. The encouragement that I received from all was overwhelming; and I must say to you here to-night, speaking the truth, that never in my life did I believe that there were so many good—glorious good—souls as I found there in the Congress of the United States. You have no idea of the tasks they perform—of their incessant labor."

The *Polaris* stopped at New London, left there on the 3d of July, and arrived at St. John's, Newfoundland, on the 11th, where the party were hospitably entertained. During their stay here a reception and banquet were given to the officers at the house of the Governor; and the explorers left on the 19th, accompanied by the good wishes of the inhabitants.

On the 27th of July the *Polaris* entered the harbor of Fiskernaes, Greenland, the birth-place of Hans

Christian, whose services Capt. Hall wished to secure. Hans, however, was not there, but at a settlement further north. Continuing on, the explorers reached Holsteinberg on the 31st, and there met Captain Von Otter's Swedish Arctic Expedition which was then on its way home.

Leaving Holsteinberg on the 3d of August, the *Polaris* anchored the next day off the port of Godhaven or Lieveley, on the island of Disco, and there awaited the arrival of the U. S. steamship *Congress*, which had been sent to carry coal and provisions for the use of the expedition.

While at Disco dissensions arose among some of the officers of the *Polaris* as to their respective rank and duties; but the arrival of the *Congress* had a salutary effect, and through the interference of Commander Davenport of that steamer, a good understanding was apparently re-established.

The *Polaris* left Godhavn on the 17th of August, amid the cheers of the crew of the *Congress*, and arrived the next day at Upernavik where she took on board Hans Christian, the Esquimaux who had accompanied Drs. Kane and Hayes in their voyages to the North, with his wife and three children; also some dogs, seal-skins and coal. On the 21st the voyage north was resumed, and at Tessuisak, which was reached the next day, Captain Hall made his last adieu to the civilized world in the following letter, which reached its destination by way of Copenhagen in just about one year after it was written. Nothing later respecting the expedition was known by civilized people until a portion of the crew were rescued from the ice nearly two years subsequently, as related in next chapter.

LATITUDE $73^{\circ} 21' 10''$, LONGITUDE $56^{\circ} 54' 5''$ W., }
UNITED STATES STEAMSHIP POLARIS, }
TOSSAO OR TESSUISAK, GREENLAND, }
August 22d, 1871. }

SIR—I have the honor to report my proceedings since the dates (August 20th and 21st) of my last communication, written at Upernavik. It was half-past eight P. M. of August 21st when we left the harbor of Upernavik, having on board Governor Elberg, of whom I made previous mention, and several of his people, bound for this place on a visit. After steaming twelve miles to the northwest and westward we hauled up in front of a small island settlement called King-i-toke, where Governor Elberg and myself, with a boat's crew, went ashore to purchase dogs, furs and other requisites for the expedition. I was able, after considerable difficulty, to get eleven dogs to add to the number already possessed by the *Polaris*. Having spent two hours at King-i-toke we returned aboard.

At one A. M., August 22d, we renewed our voyage for Tossac, making our way, by the aid of good native pilots, among the numerous reefs, rocks and islands with which Upernavik and vicinity abound. At half-past five A. M. of the 22d we arrived at Tossac. At once I called on Jensen, and to my astonishment and disappointment found that a mistake had been made in any one of us expecting that his consent could be obtained to leave his home at the present time.

By the full consent and co-operation of the government authorities of Denmark resident in Greenland, I have concluded a contract with Hans Christian, by which he enters the service of the United States North

Polar Expedition as dog driver, hunter and servant. The wife and three children are to accompany Hans. The prospects of the expedition are fine—the weather beautiful, clear and unexceptionally warm. Every preparation has been made to bid farewell to civilization for several years, if need be, to accomplish our purpose. Our coal bunkers are not only full, but we have fully ten tons on deck, besides wood, planks, tar and rosin in considerable quantities, that can be used for steaming purposes in any emergency. Never was an Arctic expedition more completely fitted out than this.

The progress of the *Polaris* so far has been quite favorable, making exceedingly good passages from port to port—first from Washington to New York, thence to New London; then to St. John's, N. F., and thence to Greenland. First to Fiskernaes, then to Holsteinberg, thence to Godhavn, Upernavik, and this port (Tossac), the last link binding us to the land of civilization. The actual steaming or sailing time of the *Polaris* from Washington to New York was sixty hours, and from the latter place to this—the most northern civilized settlement of the world, unless there be one for us to discover at or near the North Pole—has been twenty days seven hours and thirty minutes. There is every reason to rejoice that everything pertaining to the expedition, under the rulings of High Heaven, is in a far more prosperous and substantially successful condition than even I had hoped or prayed for. We are making every effort to leave here to-morrow. I will at the latest moment resume my place in continuing this communication.

Evening, August 23d, 1871.—We did not get under way to-day, as expected, because a heavy, dark fog has prevailed all day, and the same now continues.

The venture of steaming out into a sea of undefined reefs and sunken rocks, under the present circumstances, could not be undertaken. The full number of dogs (sixty) required for the expedition, is now made up. At the several ports of Greenland where we have stopped we have been successful in obtaining proper food for the dogs.

- Aug. 24: 1 P. M.—The fog continues, and we cannot wait for its dispersion, for a longer delay will make it doubtful of the expedition securing the very high latitude I desire to obtain before entering into winter quarters. A good pilot has offered to do his very best in conducting the *Polaris* outside of the most imminent danger of the reefs and rocks. Now, half-past one P. M., the anchor of the *Polaris* has just been weighed, and not again will it go down till, as I trust and pray, a higher, a far higher latitude has been attained than ever before by civilized man. Governor Elberg is about accompanying us out of the harbor and seaward. He leaves us when the pilot does.

Governor Lowertz Elberg has rendered to this expedition much service, and long will I remember him for his great kindness. I am sure you and my country will fully appreciate the hospitality and co-operation of the Danish officials in Greenland as relating to our North Polar Expedition.

Now, at a quarter past two, the *Polaris* bids adieu to civilization.

Governor Elberg leaves us, promising to take these despatches back to Upernavik and to send them to our Minister at Copenhagen by the next ship, which opportunity may not be until next year. God be with us. Yours ever,

C. F. HALL.

To GEORGE M. ROBESON, Secretary of the Navy,
Washington.

CHAPTER XLIV.

ADRIFT ON THE FLOES.

ON the 30th day of April, A. D. 1873, as the steamer *Tigress*, of St. John's, Newfoundland, was steaming some forty miles off the coast of Labrador on a sealing expedition, she was hailed, about five o'clock in the morning, by an Esquimaux, who paddled alongside in his kyak and called the attention of her crew to a group of miserable looking men, women, and children, who were adrift on an ice floe, near which, in a dense fog, the steamer had providentially come.

The *Tigress* immediately headed for the castaways, her crew giving and receiving hearty cheers as they drew near. Two boats were immediately sent off, and the whole party were soon on board the steamer, where Capt. Bartlett and his crew of one hundred and twenty Newfoundland fishermen treated them with much hospitality and kindness.

The rescued party numbered nineteen persons, ten white men and nine Esquimaux. Briefly, their story was a fearful and thrilling one. They were a portion of the officers and crew of the Arctic steamer *Polaris*, and the Esquimaux connected with the Expedition. They were separated from their steamer on the night of Oct. 15th, during a snow storm and a heavy gale which had suddenly driven the vessel off from the ice

SIGNALING THE TIGRESS.

floe to which she was fastened, leaving the party behind on the ice. Not being able to regain the ship or to reach the land, they had remained on the floes for one hundred and ninety-six days, during which time, exposed to hunger, and the winds, waves, and frozen convulsions of an Arctic winter, they had drifted southerly some fifteen hundred miles. Capt. Hall died on board the *Polaris* on the 8th day of November, 1871, and was buried in a frozen grave. Of the fate of the ship and the balance of the crew they knew nothing.

As the *Tigress* had not secured a full complement of seals she continued northward for several days, encountering heavy drifting ice, but meeting with poor success in catching seals. On the 7th of May she was headed south, and arrived at Bay Roberts, a fishing port near St. John's, on the 9th of May.

Here the *Tigress* remained till the 12th of May. The party went ashore, and were very kindly received by the inhabitants. They were also visited by many gentlemen from St. John's, including the ubiquitous correspondent of the *New York Herald*, and through his enterprise the sad news of the death of Capt. Hall appeared in that paper of May 10th. The news of the disaster to the Arctic Expedition reached St. John's on the 9th of May, and the U. S. Consul immediately telegraphed to Washington, D. C., an official announcement thereof.

The inhabitants of St. John's have a thorough knowledge of the dangers of the Arctic Seas, and were able to understand the sufferings and privations which the abandoned mariners must have endured ere they were rescued. Therefore the arrival of the *Tigress* with the survivors was impatiently expected at that

port, and no sooner had the ship dropped anchor in the harbor on the 12th, than crowds, putting off in boats, besieged the decks, and overwhelmed the strangers with intense curiosity and torrents of questions as to the origin of their strange condition, and the unparalleled powers of endurance which had brought them triumphantly through so many stupendous perils.

But if the excitement on board the vessel was considerable, the scene as the boats approached the shore was one of wildest enthusiasm. It happened that there was ice in the harbor, which in certain places obstructed their passage, and as the boats' heads were turned one way or another to obtain an entrance, dense columns of people of all classes moved up and down the quays lining the water of the harbor, according as the course seemed to be directed to one point or another.

At the landing an impetuous rush was made to obtain a view of the novel strangers. The Esquimaux children were carried through the streets on the shoulders of some of the prominent citizens, and the whole party was escorted to homes which had been previously provided for them by the U. S. Consul, who had been instructed by the Hon. George M. Robeson, Secretary of the Navy, to advance money and every requisite assistance to the long suffering mariners.

The rescued party consisted of the following persons: George E. Tyson, assistant navigator; Frederick Meyer, meteorologist; J. W. C. Kruger, G. W. Linquist, Frederick Auntiny, Peter Johnson, Frederick Jamka, and William Linderman, seamen; John Heron, steward; William Jackson, cook; and the following Esquimaux: Joe, his wife Hannah, and his adopted

daughter Punna ; Hans Christian, his wife, and his children Augustina, Tobias, Lucci, and a baby which was born on board the *Polaris* only two months before the company parted from that vessel. This child was baptized during the stay of its parents at St. John's.

With the exception of Hans and his interesting family, all of these persons were members of the expedition from its start. Hans, his wife, and three children, joined it at Upernavik. This is the same Hans who accompanied Dr. Kane on his second expedition, during the trying vicissitudes of which he acted well his part. He subsequently went with Dr. Hayes' expedition, and has figured in Sunday-school literature as the devout Moravian. When Dr. Kane's party last saw Hans he was driving south with Shang-hu's pretty daughter by his side, and it is presumed that she is the present Mrs. Hans.

The news of the death of Capt. Hall caused sorrow throughout the country ; while the meagre story of the drift on the ice excited deep and absorbing interest, mingled with doubts as to its truth. It was claimed that such experiences were unparalleled and highly improbable ; and reasoning from the strange separation from the ship, the reticence of Capt. Tyson, the discord among the officers at Disco, and the suspicious circumstances attending the death of Capt. Hall, the public began to believe that there had been foul play somewhere. Not a few accepted the theory that Hall had been poisoned by some one remaining behind with the ship, and that Capt. Buddington had willfully deserted those who, at his own command, had betaken themselves to the ice. The friends of Buddington claimed, on the other hand, that back of all was a story of mutiny and desertion which would

only be brought to light by the return of the *Polaris*.

Under these circumstances, and in view of the fact that the *Polaris* had been sent out by the Government, and that it might be in need of assistance, it was considered of great importance that the authorities at Washington should be put, as soon as possible, in possession of full and reliable knowledge of all the facts of the case. The Secretary of the Navy therefore, in the absence of any regular communication with St. John's, sent the U. S. Steamer *Frolic*, Commander C. M. Schoonmaker, to bring the party direct to Washington. She sailed from New York, for that purpose, May 15th.

The *Frolic* arrived at St. John's, May 23d. Taking the *Polaris* party on board, she started on her homeward trip on the 28th, and arrived at the Washington Navy Yard on the 5th of June. Commander Schoonmaker reported that he had had no trouble with his charge, and that they were all well-behaved, orderly people. He had formed a very favorable opinion of Capt. Tyson, and considered him a remarkably intelligent man.

Orders were given that no person should be allowed to communicate with any one on the *Frolic*, and an examination of the *Polaris* party was commenced the same afternoon at the navy yard before the Secretary of the Navy, Commodore William Reynolds, Professor Spencer F. Baird of the Smithsonian Institution, and Capt. H. W. Howgate of the Signal Service. The investigation lasted six days and was very thorough, each member of the party being separately examined under oath, excepting Mrs. Hans Christian, Punny, and the little Christians. The results of this investigation will be given at length in following chapters.

CHAPTER XLV.

THE STORY OF THE ICE-DRIFT PARTY.

BACKED by a glacier and fronted by a bay, Tessuisak, the most northern abode of civilized man, has the characteristic features of an Esquimaux village; dirt and grease all the year around, dark for four months, accessible through the floating ice of an Arctic Summer for only two. But Tessuisak has an importance of its own. Here Arctic explorers cut the last link that binds them to home and friends, here the *Polaris* cast off from civilization, August 24th, 1871, and here the history of the expedition as told by the rescued survivors of the ice-drift begins.

For three days the ship steamed up Smith's Sound through the usual perils of Arctic navigation. Past Kane's winter-quarters and the abandoned *Advance*; through the bergs with which the great Humboldt Glacier on the right filled the sea; now dodging a berg and now sailing past a floe the stout ship went on, "going against ice like one berg going against another" says one of the sailors enthusiastically. Already farther than any vessel had ever sailed to the west of Greenland, she still kept to the North through Kennedy's Channel, till Kane's "Open Polar Sea" was proved a bay and named after the vessel that first cut its waters; till Cape Lieber, for ten

years the limit of northern discovery, Hayes' final achievement, lay astern,—on, through a hundred miles of new discoveries, into Robeson's Channel, now first named.

On Wednesday, August 30th, the mists of approaching ice-fields shut around the vessel, and her engines were stopped; she lay beset by ice at a higher latitude than any ship had ever been— $82^{\circ}16'$. Parry's sledges, after weeks of toil, had penetrated but thirty-four miles farther. The coveted prize of a life-time lay almost within Captain Hall's grasp. The Pole, over which he had fondly dreamed of anchoring the vessel he commanded, was but five hundred and twenty-nine miles away—only four days' sail, and he had gone nearly twice the distance in the week before. The weather was warm; six weeks of the long day were still his. A gale from the south, a bold dash through an opening lead, and the *Polaris* might furl her sails in the starlit calm of a Polar sea.

After being tied to a floe for a few hours the *Polaris* steamed eastward, where Hall in a small boat examined an inlet, but as the place was not suitable for a harbor he called it Repulse Bay. He then steamed westward and fastened to a floe for the night. After a council of officers, in which Buddington was in favor of gaining a winter harbor without delay, an unsuccessful attempt was made to penetrate north, and as a result, the *Polaris* was soon helpless in the midst of the pack, and for four days drifted southerly with it.

When released from the ice the *Polaris* was headed eastward, and, at a small inlet of Polaris Bay, found a tolerably secure anchorage in the lee of a stranded ice-berg in latitude $81^{\circ}38'$. Only ten days had

elapsed since the voyage from Tessuisak was commenced; but the dangers escaped were enough to give the little inlet its name of Thank God Harbor, and the hospitable berg was dignified with the title of Providence Berg. At midnight, in the full light of an Arctic summer, Captain Hall made a formal landing on the coast he had discovered, and raised over it his flag, "in the name of the Lord, and for the President of the United States."

In a few days the *Polaris* was firmly frozen in the ice. The sloping side of Providence Berg, sixty feet high, protected the vessel seaward. High cliffs, bare and brown, rose landward to the height of nearly two thousand feet, and sank away into the hills which bounded a broad and wide shore plain. The Polar Star stood so nearly in the zenith that actual measurement was required to prove it to be eight degrees north. In the coming spring and summer Capt. Hall hoped to place it directly over his head. The mountains of inner Greenland lifted their white crests fifteen miles away, and already began to shut out the sunlight in its circling march around the horizon.

The sides of the *Polaris* were banked with snow and her deck roofed from stem to stern with canvas. The dogs, fifty-four in number, were taken ashore and placed in kennels, where they were fed twice a week. The observatory, a frame building made in New York, was erected on the cliffs at an elevation of seventeen hundred feet. Provisions were put on shore, and the other usual preparations for spending an Arctic night in high latitudes completed.

Three or four weeks of daylight still remained and they were busily employed. Hans and Joe brought

in musk-oxen, hares, lemmings, and specimens of a small burrowing rat. White foxes were found in large numbers. The valleys bore bright-colored flowers, red and blue being the prevailing tints, and trailing willows—the only representatives of the trees of a warmer clime. The sea swarmed with the minute life of an Arctic ocean, and the air was populous with the birds with which previous chapters have made the reader familiar.

As he surveyed all these tokens of a still warmer climate further north, it must have been with no ordinary hopes of success that Captain Hall looked forward to the sledge journeys of the coming spring; and preliminary thereto he left the *Polaris* on the 10th of October, accompanied by Mr. Chester, Joe and Hans, with two sledges and fourteen dogs.

Setting out on this expedition, the first step taken by Captain Hall fell upon land more northern than white man's foot had ever before touched. In the progress of the journey—unhappily the last that Captain Hall was to make toward the Pole—he discovered a river, a lake, and a large inlet which he named Newman's Bay. At Cape Brevoort, he rested, and there wrote his last dispatch to the Secretary of the Navy, the original draft of which was found, in his own handwriting, in his writing-desk, on its examination in Washington after it was delivered to the Secretary of the Navy by Joe, who had kept the desk in his custody from the time it was picked up on the ice, after the separation of the rescued party from the ship. This dispatch is as follows:—

SIXTH SNOW-HOUSE ENCAMPMENT, CAPE BREVOORT.

NORTH SIDE ENTRANCE TO NEWMAN'S BAY,

*(latitude 82° 3' north, longitude 61° 20' west),**October 20, 1871.*

“TO THE HONORABLE SECRETARY OF THE UNITED STATES NAVY, GEORGE M. ROBESON :

“Myself and party, consisting of Mr. Chester, first mate, my Esquimaux Joe, and Greenland Esquimaux Hans, left the ship in winter-quarters, Thank God Harbor, latitude 81° 38' north, longitude 61° 44' west, at meridian of October 10, on a journey by two sledges, drawn by fourteen dogs, to discover, if possible, a feasible route inland for my sledge journey next spring to reach the North Pole, purposing to adopt such a route, if found, better than a route over the old floes and hummocks of the strait, which I have denominated Robeson Strait, after the honorable Secretary of the United States Navy.

“We arrived on the evening of October 17, having discovered a lake and a river on our way; the latter, our route, a most serpentine one, which led us on to this bay, fifteen miles distant from here, southward and eastward. From the top of an iceberg, near the mouth of said river, we could see that this bay, which I have named after Rev. Dr. Newman, extended to the highland eastward and southward of that position about fifteen miles, making the extent of Newman's Bay, from its headland or cape, full thirty miles.

“The south cape is a high, bold, and noble headland. I have named it Sumner Headland, after Hon. Charles Sumner, the orator and United States Senator; and the north cape, Brevoort Cape, after J. Carson Brevoort, a strong friend to Arctic discoveries.

“On arriving here we found the mouth of Newman's Bay open water, having numerous seals in it, bobbing up their heads; this open water making close both to Sumner Headland and Cape Brevoort, and the ice of Robeson Strait on the move, thus debarring all possible chance of extending our journey on the ice up the strait.

"The mountainous land (none other about here) will not admit of our journeying further north, and as the time of our expected absence was understood to be for two weeks, we commence our return to-morrow morning. To-day we are storm-bound to this our sixth encampment.

"From Cape Brevoort we can see land extending on the west side of the strait to the north 22° west, and distant about seventy miles, thus making land we discover as far as latitude $83^{\circ} 5'$ north.

"There is appearance of land further north, and extending more easterly than what I have just noted, but a peculiar dark nimbus cloud that constantly hangs over what seems may be land prevents my making a full determination.

"On August 30, the *Polaris* made her greatest northing, latitude $82^{\circ} 29'$ north; but after several attempts to get her further north, she became beset, when we were drifted down to about latitude $81^{\circ} 30'$. When an opening occurred we steamed out of the pack and made harbor September 3, where the *Polaris* is. [Corner of the manuscript here burned off.]

"Up to the time I and my party left the ship all have been well, and continue with high hopes of accomplishing our great mission.

"We find this a much warmer' country than we expected. From Cape Alexander the mountains on either side of the Kennedy Channel and Robeson Strait we found entirely bare of snow and ice, with the exception of a glacier that we saw covering about latitude $80^{\circ} 30'$ east side the strait, and extending in a east-northeast direction as far as can be seen from the mountains by *Polaris* Bay.

"We have found that the country abounds with life, and seals, game, geese, ducks, musk-cattle, rabbits, wolves, foxes, bears, partridges, lemmings, etc. Our sealers have shot two seals in the open water while at this encampment. Our long Arctic night commenced October 13, having seen only the upper limb of the sun above the glacier at meridian October 12. This dispatch to Secretary of the Navy I finished this moment, 8.23 p. m., having written it in ink in our snow-hut,

the thermometer outside minus 7°. Yesterday all day the thermometer minus 20 to 23°; that is, 20° minus to 23° minus Fahrenheit."

"Copy of dispatch placed in pillar, Brevoort Cape, October 21, 1871."

Captain Hall had hoped, when he left the *Polaris* on this journey, to advance northward at least a hundred miles; but after having gone about fifty he was compelled, by the condition of the shore and of the ice and by the state of the climate, to return and await the approach of spring for another attempt. He reached the ship on the 24th of October, apparently in his usual health, but was attacked the same day with sickness of the stomach and vomiting; and, taking to his bed, the next day was found to be seriously ill. Dr. Bessels attended him professionally, and he recovered sufficiently to leave his bed, to move about his cabin a little, and to attempt to attend to business; but he soon had a relapse, became again delirious, and died on the 8th of November 1871, from attacks of apoplexy, as was generally reported and believed.

During his illness, Captain Hall was nursed by the faithful and affectionate Hannah, and she and her husband were greatly grieved at the loss of their old and well-tryed friend. The following is her account of his sickness:—

"About an hour after getting on board, Captain Hall sent the little girl to call me up. I found Mr. Morton undressing him and washing his feet. Captain Hall was sick. He spoke about being sick and vomiting. I asked him if he had got cold. He said he felt well enough in the morning. Next day very sick. Worse than last night. I observed him close.

He was very sleepy. He felt bad. Did not say much.

"After he had been bad about the head he began to get better. Then he talked about the coffee. Said it made him sick. Too sweet for him. When something was the matter with his head, and he was hallooing and talking, he talked of somebody having poisoned him, but only when he was crazy. I do not believe any body had poisoned him."

Joe, who accompanied Capt. Hall to Newman's Bay, gives the following account of his sickness and death:—

"I had driven sledge very hard, and after supper went to sleep down stairs. Captain Hall did not eat supper, but only took cup of coffee. I did not see him that night. I saw him next morning, Sunday morning. He did not speak. He remained abed. After breakfast he asked to speak to me. He says, 'Very sick last night.' I asked him 'What is the matter.' He says, 'I do not know. I took a cup of coffee. In a little while very sick and vomiting.' He was sick the first time two or three days. Complained of stomach, headache, and bone-ache. After he got better I go see him every day—every night. After a while something the matter with head. Did not know anything. Perhaps crazy. I tried to speak him. He did not know me. I wish to stay with him. Captain Hall called me to stay with him. After he got better, I asked him what made him sick. He says, 'I don't know.' Everybody went to breakfast. I staid with him. I said I was very glad he was better. He said 'I have been sick. Don't know whether I will live or not.' I asked him, 'Do you know what is matter?' He says, 'I can't tell what

FUNERAL OF CAPTAIN HALL AT POLARIS BAY.

is the matter. Bad stomach. Very bad stomach.' After getting breakfast I wanted to find out what was the matter with him. A man came down into the cabin, and he said nothing to me more. After that Hannah talked to him. Every morning I was absent seal-hunting. I overheard Captain Buddington talk about Captain Hall. I wanted to hear. Captain Buddington said he was sick again. Did not know me. Once in a while he called, 'Halloo, Joe!' Then did not know me. Two nights he was very sick. Died two nights and one day after."

It takes two days to dig a grave with picks and ice-chisels and axes in the flint-like ground, and on the third day after his death, the crew, dressed in their Arctic clothing and with lanterns in their hands, bear to their long rest the remains of their loved and honored commander. The bier, covered with the national flags, rests on a sledge which the men, in procession, two by two, draw gently by the rope. Following the sledge, the Esquimaux straggle on in bewilderment and grief at the scene. The flag on the observatory droops at half-mast, and the ice-bound waters of Polaris Bay shimmer in the clear light of the stars and in the more fitful gleams of the evanescent Auroras. At the grave, by the light of "lanterns dimly burning," Mr. Bryan reads the funeral services.

A rude head-board marks the shallow resting-place of the lost explorer. For long months round it sweeps the unsetting sun in the long circles of an Arctic day, and over it shines the Polar star. It is fitting that they, and they alone, should keep watch and ward over the grave of one who so nearly stole from Nature, secrets which their eyes alone have rested on.

Ten days after Captain Hall's burial, the *Polaris* felt the first real dangers of Arctic navigation. For forty-eight hours a severe gale accompanied by a snow-storm swept from the north-east, and the ice around the ship began to crack and the snow-wall, laboriously banked as a protection for the winter, to settle. The next day the ice broke all around the vessel, the snow-wall sunk out of sight, and in the ice that crashed in about the ship from the shore, her port anchor ceased to hold. It was a moment of intense peril. In the darkness of a whirling snow-storm and an Arctic night, so dense that objects twenty feet distant were invisible, she was drifting—drifting, with the sloping wall of Providence Berg full in her lee. Her starboard anchor rattled down, but the *Polaris* dragged two anchors as easily as she had one. Forced on by the ice, and driven by the moving hurricane, the crew watched momentarily for the wall of sloping ice that was to wreck or save their craft. For two hours they kept their watch through the wreathing snow. The vessel was less than half its own length from the berg when the great white wall that rose half-mast high above them was discovered by the anxious crew.

Providence Berg was again their salvation. Volunteers were called for to moor the ship to the berg. William Linderman, seaman, performed the dangerous duty. Cutting steps in the smooth icy slope with a hatchet, he fastened an ice-hook. Other lines were made fast aft in the same manner, by fastening heavy iron hooks, weighing seventy-five pounds, in the berg, and the vessel rode once more in safety. Some of the stores and three of the sleighs, one a companion of Dr. Kane, were lost in the breaking ice; fortunately the dogs were in safety on board.

A week later and another gale broke from a directly opposite quarter—the south-west. The iceberg to which they had moored in their peril seemed likely to prove their destruction. Ice from the strait without crowded in upon it. The immense mass moved slowly toward the little steamer which lay moored twenty feet from its base. Under the enormous pressure the great block of ice broke. It must have sounded like the crack of doom to the seamen, who saw their only protection from southerly gales parting before them. Half of the berg drifted on to the vessel. The ice had been piled high and deep behind her by the previous gale. There was small chance of moving shoreward. When the nip came she rose bodily in the air. Foot by foot, her timbers cracking, her seams opening, her whole frame quivering in the terrible embrace, the *Polaris* rose. A projecting spur struck her, and the ship went over till her deck was too steep to walk upon. There on her beam ends she lay the winter through.

The long winter wore away. There was little to relieve the dreary monotony of enforced idleness. The steep, sloping deck was roofed with canvas and dimly lighted by a lantern. Below, there was warmth, comfort, and comparative luxury. No better proof of the thorough and careful equipment of the *Polaris*, or of the excellence of the stores, and we may add of the discipline of her commander, in spite of testimony to the contrary, need be given, than the fact that the whole winter passed without a case of scurvy. Some few symptoms were felt, but they all disappeared under treatment.

Without the vessel, silence, cold, desolation, reigned supreme. By the side of the steamer rose the

jagged and splintered sides of the berg, gleaming brightly in the moonlight, reddened by auroral flashes, or standing white and ghostly under the stars. Across the heaped and broken shore-ice a well trodden path led to the observatory. Hourly observations were held there, and the path was a familiar one; but when a storm came, and the berg faded out of sight, and the whole atmosphere was full of driving snow so fine that it sifted through clothing and could only be kept out by furs, men staggered along the familiar track, scarcely able to reach the ship, but a few yards off. Near by were the huts, in which the Esquimaux of the expedition passed the winter.

The *Polaris* lay undisturbed on her icy dock, but terrific gales kept the strait ice in motion. Bergs were continually sweeping it clear of ice and at no time was it closed by ice more than a few weeks old. The entire mass showed clear signs of a drift southward. This fact and the drift-wood discovered in a journey afterwards undertaken, prove that Smith Sound and the chain of straits above it, all communicate at length with open water. To reach this, if possible, in boats was now the object of the explorers.

The work was begun promptly. In the darkness of the last week in January, Dr. Bessels pushed to the north in a sledge with eight dogs and two members of the crew. Nine miles away they were checked by an ice-bound cape, which they could not climb, and returned, having noted only that the ice in the strait was drifting loosely in the current. The next day another party made an attempt along the mountain chain, but with equal ill-success. The steep ice-clad cliffs could not be scaled. It was too plainly

the night when no man can work. They must wait for daylight.

A month later, February 28th, as noon drew near, there came a glad cheer from the little company. For a hundred and thirty-four days they had timed the hours by their watches, by the stars, by the moon, by everything except daylight; and now the stars faded utterly away, and the sun rose over the glistening peaks of the mountains that had fringed for a month past the twilight of the coming day. In a few moments the sun was gone. But the long darkness was over. The greatest extreme of cold was yet to come; there were yet four months of weary waiting in the ice; but henceforth daily the sun rose above the horizon, and the diaries and conversations of the men all take a more cheerful turn.

Early in March Hans patience was rewarded by a seal, and before April was gone nearly all the game had returned. Strangely enough the musk-oxen came from the north-west. These animals were smaller than those found in Labrador, and without the strong musky smell which makes their flesh unpalatable. With their long, shaggy hair and short, sharp horns, they seemed formidable antagonists, and generally adopted the same tactics which they use when attacked by wolves. Standing in pairs they would rush forward a few feet towards the hunters, and then spring back again. When one fell the other defended him, till he too was struck down by a bullet. As spring advanced they were found with their calves, but the young were rarely perceived till the dams were shot down, as they took refuge when attacked directly under the older animals, and were entirely concealed by the long hair which came to the ground. Several bears

were killed, all smaller than their brethren of Southern Greenland. The tenacity of life which the dogs displayed was wonderful. Caught up by an enraged bear and flung against clumps of ice, stunned, and left for dead, they were sure to limp into camp the next day, but little the worse for the experience.

Three exploring expeditions were undertaken—two on sledges and one by boat. The first in April, comprising Dr. Bessels, Mr. Bryan, Hans and Joe, pushed forty miles to the south, and linked the discoveries of the "Polaris" with those of the "Advance."

Drawn by eight powerful wolfish dogs, the explorers pushed on till stopped by open water along the shore, and by the steep coast. Two fiords were passed and mapped to their termination. These deep and narrow indentations of the sea are as prominent a feature of the Greenland as of the Norwegian coast. The two explored were surrounded by glaciers and filled with icebergs. Their sides rose steeply from the water, often to a height of nearly seven hundred feet. These lake-like inlets are of rare beauty and of peculiar geological interest, but were a serious bar to the rapid exploration of the coast. A month later a double expedition was sent northward to survey Newman's Bay and search for open water.

On shore the snow was rapidly melting, and the valleys and ravines were rushing torrents of water. Dangerous crevasses in the glaciers which must be crossed made further travel by sleighs out of the question. Journeys with boats were therefore attempted, and it is scarcely possible to exaggerate the pluck and persistence exhibited therein. One party had encamped for the night on an ice-field a mile from shore, when they were suddenly awakened by

another field drifting down on them. In an instant the smooth field on which they were, seamed and cracked in every direction. Hummocks sprang up under their feet. Great cakes of ice rose twenty, thirty feet in the air, and fell with a deafening crash. The ice opened and the party were separated, two on one piece, while the boat and crew were on another. In another instant the boat itself lay flat beneath a fragment of an iceberg which had moved into the field. Nothing daunted, the party returned to the vessel, and in four days were afloat in a canvas boat. For two weeks, the two crews of four men each, accompanied by Tyson, Chester, Bessels, and Meyers, continued their dangerous work.

It was the old, old story of Arctic adventure. Leads opening to close again in a short time. A few miles of nothing gained by hard rowing and an encampment made, only to find in the morning that the whole floe had been drifting south. The melting ice was covered with water, and their sleeping-bags were nightly soaked. The fuel was so nearly exhausted that coffee could be prepared but once a day, and the pemmican and preserved meat were eaten cold. Ceaseless care was needed to preserve the boats from a second accident. Often the lives of the party would hang on the few minutes of rowing needed to reach some safe sheet before the pack-ice, drifting down on them, had crushed boat and crew.

Two of the party returned to the ship June 27th, to obtain provisions. They found her sinking. Steam pumps were running sixteen hours out of the twenty-four to keep her afloat. In May, when the ice first began to melt, she had begun to leak, and ever since

seemed to fill as she settled. She soon floated freely, and her condition improving, an unsuccessful attempt was made to run to the north to take on the boats. Hans was then sent, with orders to the excursionists to return as soon as possible; but it was three weeks before all had come back.

On the 14th of August, the *Polaris* turned homeward. The voyage up had been accomplished in a week; it was to be eight months before even a part of the ship's crew would be rescued from the ice. August passed, September wore away day by day, October was half over, and the good ship still fought a vain battle with ice-floes and bergs. She entered leads only to have her timbers strained by nips. The young ice encased the vessel, and no opening came through the floes beyond. The ship steadily became more unseaworthy. Preparations were made for leaving her at an instant's notice.

On the night of the 15th of October 1872, in about latitude $79^{\circ} 35'$, during a violent gale of wind and snow, the *Polaris* was beset by a tremendous pressure of ice, which was forced under her and finally threw her over on her beam ends. Captain Buddington ordered the provisions, stores and materials, which had been previously arranged in readiness on the deck, to be thrown overboard on the ice, and directed that Tyson and half the crew should go upon the ice and carry these stores upon a thicker part of the floe, where they would be comparatively safe. He also sent all the Esquimaux with their kayaks out of the ship, and lowered the two remaining boats upon the floe. While thus engaged, in the darkness of an Arctic night and in the midst of a fierce gale, the hawsers of the *Polaris* failed to hold her, and she

broke adrift from the floe and in a few minutes was out of sight of the party on the ice.

At the time of this involuntary separation there were nineteen persons on the ice, but some of the men and a large share of the provisions were on pieces of ice separate from the floe. The men were all secured, but much valuable food was lost. The party on the floe rolled themselves up in musk-ox skins and passed the night as best they could. Captain Tyson kept guard, and walked the ice, watching anxiously for the morning and looking eagerly for the *Polaris*. The morning came, but with it came no sign of the ship.

The next day the party made several attempts to reach the land with the boats, but failed, notwithstanding their most persistent efforts, owing to the obstruction of the ice and the violence of the wind. During this day the *Polaris* came in sight to the northward, apparently coming toward the floe under steam and sails. A blanket was hoisted on an oar, and displayed from the top of a hummock, and other signals made to attract the attention of Captain Buddington, and strong hopes were entertained by the shipless mariners that they would be rescued. They were doomed to disappointment. The *Polaris* approached so near that they could distinguish her escape-pipe, and they plainly saw her down to her rail; but she altered her course and disappeared behind an island. Again in the course of the day the *Polaris* was discovered with her sails furled, apparently at anchor near an island. It was very natural that Tyson and his party in their desperate circumstances, should conclude that Buddington was either over cautious as to his own safety or indiffer-

ent to theirs, but it must be remembered that the *Polaris* was in a leaking condition and without a single boat of any kind, while the ice-bound company had two boats, the kayaks, and a scow in their possession.

Shortly after the *Polaris* had been sighted a second time, a violent gale from the north-east sprang up, and the floe drifted away to the southward, with these nineteen persons still upon it. The floe was originally of a circular shape and about five miles in diameter. Captain Tyson estimated its thickness to vary from ten to thirty feet. Much of its surface was covered with snow and there were hillocks and depressions.

Fortunately a pretty good stock of provisions had been saved, and the Esquimaux made some snow huts in which the party lived and kept their stores. These huts, four in number, were built in the shape of an old-fashioned straw bee-hive, about six feet high, with a hole at the bottom large enough for the men to crawl in. Some old canvas served for a flooring on which musk-ox skins were placed for beds, and other skins answered for bed-clothes. Some pemmican cans were used for lamps; seals furnished the oil; and moss, or canvas took the place of wicking. Mr. Meyer made some weights out of shot, and daily rations were dealt out, eleven ounces being allowed to each person.

The discipline of the party does not appear to have been of the best; indeed, Capt. Tyson states that there was little or nothing that could be called discipline. Every one did as he pleased, and it is not strange that Hannah, surrounded as she was by armed and at times hungry men, suffered terribly from fears

of what might happen if the provisions gave out entirely. Still all knew that their salvation depended upon union and mutual co-operation, and there was a discipline of circumstances, if not of morals and law.

On the 1st of April, finding their icy quarters much reduced by the breaking up of the floe, they launched their boat into open water and pulled towards the west, in order, if possible, to gain the coast. At times meeting ice too closely packed to get through, they were compelled to haul the boat upon it, launching her again as soon as a lead opened to the westward or southward. In this way they passed a month of weary and desperate endeavor.

Toward the close of April their provisions were almost exhausted, and they were one day absolutely reduced to less than a biscuit apiece and a mouthful of pemmican, when a bear, scenting them on the ice, approached them and was shot, and they were thus rescued from starvation. Revived by this good fortune, and strengthened by their new supply of fresh meat, they struggled on till the last day of April, 1873, when they were rescued by the *Tigress*.

The incidents of this most extraordinary voyage of six-and-a-half months on floating ice, as related in the diary of John Herron, are given in a subsequent chapter, and in all the records of adventure there is nothing of greater interest.

The safe deliverance of the entire party—men, women and children—seems at first almost a miracle, but is due in a great measure to the special means of escape from danger which the Frozen Zone furnishes. The friendly ice-floe abounded with material for building shelter from the storm and cold, while it drifted the castaways into the vicinity of passing

ships, and through a region where the presence of seal and other Arctic animals enabled the skillful hunters, Joe and Hans—to whom the balance of the party are indebted under Providence for their preservation—to eke out the supply of provisions which would otherwise have been exhausted. In any other section, a boat's crew thus left in mid-ocean at such a distance from relief, must almost certainly have perished.

CHAPTER XLVI.

JOURNAL OF HERMANN SIEMANS, A SAILOR OF THE STEAMER POLARIS.

AMONG the articles remaining on the ice-floe at the time when the Polaris was separated from a portion of its crew, was a diary kept from the commencement of the voyage by Hermann Siemans. This diary was picked up by the ice-drift party, and has special interest from the wonderful manner in which it was preserved and as being an intelligent history of the expedition—as far as it goes—by a common sailor who had the forethought and disposition to keep a record of passing events. It was written in German, and has been translated into English by E. R. Knobb Esq. The most interesting portions are given below.

The spirit of dependence upon Providence, and the habitual recognition of God's mercies are noticeable throughout, while the petition on starting, breathing the spirit of resignation to whatever might occur, is a touching indication that there was at least one person in the expedition of strong faith and fervent prayer.

PRAYER WHEN STARTING.

“ALL-KNOWING FATHER, on Thee I call and pray, that Thou mayest look upon us in Thy mercy and may be

with us in this cruise to the icy North. Thou only knowest whether we ever on earth shall see again our beloved, or whether we shall soon lay down our pilgrim's staff. I pray Thee to direct the hearts of all of us, that all on this ship may always bow before Thee. Let our eyes always be directed toward the heights of Golgotha, where Thou hast borne the burden of our sins. Lead us to endeavor to gain that which only is needed, that we may all say together, we know that our Redeemer liveth. Then, even if the iceberg covers our mortal part, or the fierce polar bear tears it, we shall have Thee, Saviour, the best guide of our heart's ship. Hear my prayer in Thy great mercy, and for the Saviour Jesus Christ's sake. Amen.

June 29th.—At 6 p. m. we left New York, and arrived on the following day at 11½ a. m., at New London, where we dropped anchor. In the evening we had divine service on board, in which quite a number of members of the Baptist congregation participated.

July 3d.—We left New London, with fine weather.

Sunday, 9th.—We had divine service from 11 to 12 a. m., and Captain Hall promised to have it, with God's aid, every Sunday. I was heartily glad that the name of our Heavenly Father should thus be hallowed.

Monday, 10th.—We saw the coast of Newfoundland.

11th.—Several heavy blocks of ice were passed. At noon, we entered the harbor of Saint John's, in which there were two icebergs.

On the 19th, we left Saint John's, with God's aid all well and contented.

On the 27th, we saw the west coast of Greenland and a great number of icebergs—some near the coast. At 3 p. m. a pilot boarded us in a kayak. At 5:30 p. m. we came to in the harbor of Fiskernaes. Greenland, which I then saw for the first time, is truly a sterile, mountainous country. This

Danish settlement consists of twenty houses and huts, with about seventy people. The houses of the governor had a decent appearance, being of wood; but the huts of the Esquimaux were composed of pieces of sod, with so low an entrance that the people could only creep into them; a few were covered with seal-skin; the interior looked very poor. The natives live almost entirely on fish; they are quite intelligent, and there is more brotherly love between them than in many Christian communities. Their garments are made of seal and reindeer skin; their boots are generally lined with feathers. The women wear jackets and pants like those of the male, but they are distinguished by a black head-cover, through the top of which the hair hangs out in a plait, interwoven with red ribbon; they also wear short boots, while those of the men are long.

Saturday, 29th.—We left Fiskernaes with beautiful weather. At four hours we passed Lichtenfels, where two German missionaries live.

July 31st.—We entered the harbor of Holsteinborg, where we counted sixteen huts and fifty people.

August 3d.—We left Holsteinborg, and in the morning of the 4th we came in sight of Disco Island. At 2 p. m. a pilot came on board, and at 3 p. m. we anchored off Godhavn. This settlement contains twenty-seven houses, with about seventy people.

Sunday, 6th.—Captain Hall with some of us visited the church, where also thirty Esquimaux attended.

10th.—The United States ship Congress arrived from New York, with provisions and coal for us.

17th.—We received some Esquimaux dogs, which are to draw the sleighs in our excursions. At noon, Rev. Newman of Washington and Rev. Bryan of the Congress came on board; the former preached a sermon and prayed with us. At 2 p. m. we left Godhavn with fair weather, and passed the same day many icebergs, which compelled us to change frequently the course.

On the 18th, we entered the harbor of Upernavik. This settlement consists of twenty-two houses, inhabited by sixty

people. The Esquimaux appeared more dirty the farther north we came; most of them looked as if they had been smoked. Here Hans came on board, with his wife and three children.

20th.—Toward evening, I ascended a hill, where I prayed some hours to God and my Redeemer, and thought of my distant dear. I also visited the burial-places, which lay scattered over the mountains, some almost near the tops, where it must have been difficult to carry the bodies. The coffins of rough wood were merely placed on the surface, and covered with rock. The weight of the latter had burst the lids of some, so that the bodies could be seen. The Esquimaux told us that bodies which had been buried very many years appeared exactly as when buried. Formerly the law was, among the Esquimaux, that at the death of the parents, the eldest son inherited the property. It is said that some of them have enticed their parents into the mountains, and then thrown stones upon them, under which they still lie buried.

21st.—We received on board eight tons of coal, and more dogs and seal-skins. At 7 p. m. the governor came on board, intending to accompany us to Tessuisak. At 8 we left Upernavik with fair weather, and arrived at 11 off Kingituk, where the captain and the governor landed to visit the governor of that place, returning at one o'clock with twelve dogs. We then proceeded, and came to on the 22d in Tessuisak Harbor.

24th.—We left Tessuisak, the northernmost settlement. In the evening of the 25th, we narrowly escaped running in the darkness with full steam-power against a large iceberg. In the night, from the 25th to the 26th, we were surrounded closely by drift-ice and icebergs, but with God's aid were able to work through them.

On the 27th, we passed the harbor where Kane wintered in 1860; and at 9 p. m. the winter harbor of Kane in 1853 to 1855 bore east, distant 14 miles. No vessel but our *Polaris* has ever penetrated farther north on the west coast of Greenland. Proceeding farther, we encountered great quantities

of ice, through which we pushed on north. At 11 p. m. we passed Cape Constitution, the northernmost point reached by Dr. Kane, in 1854, in sleighs, where he believed to have seen the open Polar Sea. On the 29th, we reached Cape Lieber, discovered in 1860 by Hayes, on a sleigh excursion. No one has ever been farther on the Grinnell Land side; here our discoveries were to begin. The distance of the coasts from each other, in the narrow part of the strait, is about 40 miles. The land is mountainous and high. At 4 p. m. fog set in, and at 6 we were compelled to stop the engines, as we were surrounded by great ice-fields, to one of which we fastened the ship by ice-anchors and hawsers. At 7 p. m. the fog lifted, and we could see both coasts, when we again started, trying to press through the ice, with which the ship came frequently in collision. It was very cold, the wind blowing strong from the north. We worked along throughout the night to 6 o'clock in the morning of the 30th, when we saw firm ice from one coast to the other. Under these circumstances, it became important to look for a winter station, but there seemed to be none in this vicinity. At 9.30 fog set in again with snow, and we had again to fasten the ship to a floe, where we lay to 7½ p. m., when we saw some clear water near the Greenland coast, for which we directed our course. Believing to see a small bay, a boat was lowered and the place examined, but it proved too exposed for the ship. We worked along the coast until midnight, when fog compelled us to fasten the ship.

31st.—We started and continued the search for the entire day, but in vain. At 4 p. m. we directed the course for the Grinnell Land coast, but the ice prevented us from reaching it. At 5 p. m. we made fast to a great floe.

September 1st.—We saw in the morning a small opening through which we worked the vessel about the distance of a mile nearer to the coast, where we had again to make fast, as we could then not move the ship in any direction. Toward 7 p. m. a strong easterly wind arose, setting the stream with the ice against us, the smaller pieces of the latter drifting faster than the floe to which the ship was tied. This pres-

sure broke the hawsers at the bow and the stern, and lifted one side of the ship almost bodily on the floe to which we lay, imperiling her greatly. As the ice pressing from all sides around us had a thickness of at least twenty feet, it became imperative to provide for emergencies. Provisions and stores were carried on deck, and guns, cartridges, two suits for each person, &c., placed within easy reach, so as to land them on the ice in case the ship should be crushed. Toward 9 p. m. the wind abated, the ice ceased to press, and remained quiet throughout the night. The following day, in the morning, we unshipped the propeller, in order to save it from being broken. At 2 p. m. the pressure of the ice began again, huge masses approaching the ship. All hands were now employed landing provisions and fuel on the ice, in two places, so that one part might be saved in case the ice should break near the other.

Sunday, 3d.—Divine service was attended to from 11 to 12, as usual. The snow fell so thickly as to allow us only occasionally to see the coast of Greenland, although it was distant only two miles. We now drifted quite briskly south. Ship and crew appeared to be a ready prey to the ice. But there is a God who aids and saves from death; to Him I trusted between these icebergs and ice-fields, although I know that I do not deserve all the good He grants me.

September 4th.—At 9 a. m. open water appeared at a few places, when everything was quickly shipped again. At 9.30 p. m. steam was ready, and we began to work toward the coast of Greenland where the wind had broken the ice and caused an opening. At midnight Captain Hall landed with five of us, and planted, in the name of the Lord, and for the President of the United States, the American flag on the land which we had discovered. We then returned on board and let go the anchor at 12.30 a. m. on the 5th of September. The place examined proved to be but a bend of the coast; we therefore took advantage of the open water caused by the easterly wind along the coast, and resumed our search for a harbor southward, but not finding any better place we returned in the evening to the anchorage.

7th.—We lifted the anchor, and steamed about sixty yards closer in-shore, behind an iceberg which had grounded in 13 fathoms water, and promised to protect us against southerly and, in part, also westerly winds.

Sunday, 10th.—We could not use boats any longer, and in a few hours the ice grew thick enough to carry us with the food for the dogs, that had been housed on shore. After divine service, Captain Hall told us that he would call the place Thank God Harbor, as the Lord had not only carried us through the dangers of the ice, but also protected us against the imminent peril of an explosion of the small boilers, which had not been fed with water, through the neglect of the fireman.

11th.—The ice had grown so firm that we could employ the sleighs.

The 12th was cold, and snow fell, the wind blowing strong. Until then the twilight had remained on the southern horizon throughout the nights, but these now grew longer, and soon we would have, in the midst of the Greenland mountains, the long winter night. But why should we fear the darkness around us, if light remains only in our hearts? Yes, my Lord, if I have only Thee, I do not care for heaven or earth.

Sunday, 17th.—After divine service, Captain Hall enjoined us to work hand in hand, like brethren, in order to reach our aim for which we had started. He said that he firmly believed it to be God's will that all of the wonderful earth not yet known should be discovered.

18th.—Dr. Bessels, with the first mate, Joe, and Hans, started on a sleigh, drawn by eight dogs, on a hunting excursion.

On the 23d, the sun showed a large halo. At divine service, on Sunday the 24th, the sermon and prayer were read by Mr. Bryan; they had been prepared by Rev. Dr. Newman expressly for the expedition. At 2 p. m. the hunting party of Dr. Bessels returned with a musk-ox.

October 1st. (Sunday.)—The gale ceased, and the weather remained beautiful throughout the day. After divine service, Captain Hall informed us we were, from that day, to assemble

each morning at 8.30 in his cabin for prayer. How good it is to serve under a commander in whose heart the Saviour has begun the work! We should always bear in mind that each day and each hour carries us nearer to the end of our pilgrimage, where we have to lay down our staff. I pray the Lord to open my eyes that I may look to Him with spirited confidence.

9th.—After much labor we now had carried all our things safely on the hill. About noon of this day, Captain Hall, accompanied by Mr. Chester, Joe, and Hans, started on two sleighs drawn by sixteen dogs on an expedition for the purpose of reconnoitering in the direction toward the pole.

13th.—One boat had already been transported to the shore; we now carried there a second, also coal, wood, and other things, so that a stock would be on shore in case an accident should happen to the vessel. Up to then all hands were in good health, for which I daily thanked the Lord. God, I pray Thee, let me always be obedient to the teachings of Thy holy word with ever greater cheerfulness. May never doubt or mockery destroy the consolation alive in my breast. Let my whole life be a praise of Thee. The earth is everywhere the Lord's; there is evidence even in the highest North that an almighty and all-wise Creator has made it.

13th.—We saw the sun rise for the last time in 1871.

18th.—Began building a snow-wall around the ship.

21st.—We spread over the ship a snow-tent of stout sail-cloth, leaving only a small opening for ingress. Daylight shortened rapidly.

Tuesday, the 24th, at 1.30 p. m., Captain Hall returned with Mr. Chester, Joe, and Hans. Captain Hall had not felt well for the last three days, and laid down to bed immediately. He vomited, had cramps, and a violent headache. They had encountered on the expedition severe cold, and suffered greatly. They had not been able to go farther than fifty miles from the ship in a N.E. direction.

28th.—It grew dangerous with the captain, his illness increasing steadily. Prayers and divine service were held forward for his recovery. The prayers which I sent incessantly

to the throne of the Almighty did not satisfy me; I, poor sinner, was anxious to kneel with him before God, and to pray for mercy.

Nov. 1st.—The captain appeared to grow better, as he spoke as sensibly as any of us.

2d.—The weather was beautiful and calm, although severely cold. The snow-wall around the ship was seven to eight feet thick, and of the same height as the snow-tent. The snow was carried to the ship in sleighs from banks which formed sometimes near the ship, sometimes at a distance from it.

Nov. 5th.—Captain Hall grew again worse; in the wanderings of his mind he said that somebody intended to shoot or poison him.

On the 7th, Captain Hall lay in a very miserable state, the entire body being insensible to the touch. In the evening he was entirely unconscious of what occurred around him or was done with him. At 3.25 on the morning of Nov. 8th, his soul left the mortal body. After his death a coffin was immediately made, into which he was placed at 4 p. m. We also began to dig a grave, working at it Wednesday and Thursday. The earth was mixed with rock, and frozen so hard that, although using axes and pikes, we could dig only two feet deep. It was done with the light of a lantern.

Friday, the 10th, at 11.30 a. m., we placed the corpse into the ground. Captain Hall had reached, as I was told, the age of fifty years. His body rests in the far North, where no civilized human being has ever laid down his head for eternal rest, as the place lies 502 miles from the North Pole. Thus his wish to die in the far North, and to rest where he had lived eight years, has been fulfilled. May his remains lie in peace till the day of resurrection.

Sunday, the 19th, after divine service Captain Bord (Buddington?) announced that the morning prayers would be discontinued, as Mr. Bryan was otherwise engaged; each should pray by himself. I, poor benighted sinner, must confess that I have to contend many an hour with enemies within myself and outside, but hope does not leave me. When kneeling far north in a dark corner, or beneath the starry heaven on a

floe, I look with confidence to the mountains from which I expect aid. Although not being able to show a single deed by which I may stand before the just Judge, I trust to the Lord's mercy.

Monday, the 20th, at 4 in the morning, intending to examine the tide-gauge, I was carried away by the storm and thrown upon the ice, which was covered with water; only with great difficulty could I reach the opening where the observations were made. The snow-drift did hardly permit opening the eyes. It blew so violently that the ship was thrown upon one side, bursting the snow-wall. At 9 a. m., Mr. Meyer left the vessel to look for Dr. Bessels, who had been all night in the observatory on shore; he was driven back about twenty times while endeavoring to creep up the hill, but finally reached the house. Joe and Hans followed, and at 10.30 all four succeeded in reaching the ship.

21st.—At 8 a. m., the ice broke all around us, and we were in great peril; the snow-drift, besides, made it so dark that we could not see anything at a distance of five paces. We let go the second anchor; nevertheless, the ship drifted, but luckily toward the iceberg near which we lay, and which had been named by Captain Hall, Providence Mount. Some of us jumped over the few floes between us and the iceberg, climbed upon it, and succeeded in fastening three ice-anchors, to which the ship was secured by hawsers.

25th.—In order to bring the ship, which thus far lay at the extreme of the iceberg, more toward the center of its long side, where it would be better protected, an opening was sawed into the ice, through which she was moved one hundred and twenty feet.

Sunday, the 26th, divine service was held, but Captain Bord announced that attendance was not compulsory, but he would prefer that all should attend.

28th.—At 8 p. m. a snow-storm set in from S. S. W., which soon grew violent, and at 1 o'clock had attained a force of forty-two miles per hour, pressing the ice from the strait against our iceberg, which burst and parted in two; thus weakened, it was pushed against the ship, shaking her all

over and making her crack in all seams. With ebb-tide the ship keeled over on one side, while the foot of the iceberg pushed beneath her, so as to raise her two and a half feet. She careened so heavily that it was difficult to walk on deck. In this perilous condition it was thought proper to carry apparel and other stores on shore, as also to place the Esquimaux women and children in the observatory.

13th.—There has, perhaps, never been an expedition the members of which did live so peacefully as we. The Navy Department had directed that, in case of Captain Hall's death, Captain Buddington should take command of the ship and Dr. Bessels direct the scientific matters and the sleigh expeditions. Should the two disagree, Captain Buddington had to carry the vessel home as directly as possible. As long as Captain Buddington held the command, he treated everybody properly; the first officer is also an honorable man, who knows how to handle people.

Sunday the 24th.—In the evening (Christmas Eve) all hands were invited into the cabin, but I did not feel at home there, Captain Hall not being any more in our midst.

On Christmas-day, the 25th, the weather was fine. I was astonished that there was no divine service, but, I believe, in America it is more of a feast-day than a holy-day.

28th.—The ship still careened somewhat with the rise and fall of tide, as part of the keel was still resting on the foot of the iceberg. We tried to break the latter by blasting, but did not succeed, the ice being too strong.

January 1st, 1872.—I thanked the Heavenly Father, who stood by us last year through so many perils, and granted us to live into the new year, except the dear captain, C. F. Hall, who now rests in the cold earth of Greenland.

24th.—Dr. Bessels, with two of the crew, left the vessel in a sleigh drawn by eight dogs, to ascertain how far the open water extended north; they could only proceed nine miles north of the vessel, where the water was still perfectly open; their further progress was stopped by a cape, which they could not pass nor climb, as it was too steep and too much covered by ice. At 5 p. m. they returned on board.

Feb. 28th—At noon we saw the sun for the first time in 1872, after one hundred and thirty-eight days of darkness. It was truly a long dreary night which we had passed, by the Lord's aid, in midst of icebergs and ice-fields. That day I visited Captain Hall's grave, as I had frequently done. How would he have enjoyed it to see again God's sun.

April 8th—Dr. Bessel's party returned; all well, bringing as trophies the carcasses of a seal and a polar bear. After the examination of the fiord and starting back north, Joe suddenly saw the bear; both jumped from the sleigh with their rifles, taking hold of the dogs, Joe of five, the doctor of three. But these, when they saw the fierce beast coming towards them, could not be kept back, and had to be set loose, when they at once made furiously for the bear. After fighting them for five minutes, the latter made for Joe, who allowed it to approach within sixty paces, when he fired, reloaded quickly, and with a second ball finished the beast, which had just started for him again after recovering from the shock. Two of the dogs had kept back, but the other six fought bravely; one of them was thrown by a blow from the paw of the powerful beast so violently against an ice-clump that it was left for dead on the place, but the next morning it had returned to the snow-hut.

June 5th—The ship rising steadily above the ice under the influence of the warm weather, which now melted the snow and ice rapidly, we discovered a dangerous leak on the star-board side of the stem at the six-foot mark, where two planks had split from the careening of the ship.

6th.—We endeavored to stop the leak, but could not do much, as the stem proved to have broken too deep below the water-line.

10th.—Preparations were made for another expedition in the patent sail-cloth boat, and in the afternoon Dr. Bessels, Capt. Tyson and four men left in it.

The *Polaris* we will hardly keep afloat, as she settles by degrees deeper the more the ice upon which the ship rests melts. She now makes considerable water, and there are probably more damaged places under the bow beneath the water-line.

12th.—We left the ship and reached at noon the place north of Cape Lükken where our boats stood.

15th.—The strong wind having opened the water considerably, we pushed the boat into the water and rowed until 7 in the evening, when we reached the other party, which had left Monday, on a great ice-field, at the mouth of Newman's Bay, where the ice had not yet broken up.

23d.—In the morning we at last saw, north of us, a strip of open water, and left the field immediately, but had hardly rowed two and a half miles when heavy pack-ice advanced upon us rapidly. As we could not find in the vicinity an ice-field for a station, the harder of the firm ice being covered by packed ice, we were compelled to row back half a mile, where we met one, and had barely time to draw the boat upon it. The other party had done the same half a mile south of us.

26th and 27th.—Stormy, with snow-squalls and fog, the ice continually drifting south. As provisions became short and the fuel was almost entirely consumed, R. Krüger and I, at Mr. Chester's wish, started for an attempt of reaching the ship by the land, in order to get more provisions. We went by Newman's Bay, and it was truly a severe task to climb over the high mountains and through the deep ravines where the sharp stones, split by the frost, cut through our Esquimaux boots. We made the distance, however, in twelve hours. The ice in Polaris Bay had, for the greater part, broken up, and the vessel lay in open water, in her old berth close to Providence Mount, which still was aground; but she was in a poor condition, making so much water that the pumps had to be worked for sixteen hours out of twenty-four. As there were now, besides the cook and we two, no sailors on board able to steer the vessel, Captain Buddington, would not permit us to leave again; he attempted to take the vessel to the boats, as the water appeared to be pretty open. At noon of that day, the ice-anchors were taken in and the ship proceeded north with steam and under sail, but we had hardly made half the distance to Newman's Bay when she was brought up by great ice-fields and heavily-packed ice drifting

down upon her. During the night she was permitted to drift under shortened sail with the ice in the strait to the southward.

29th.—In the morning, we again attempted to push on north, but failed. At 11 a. m. Hans was landed at a ravine north of Cape Lübken, in order to inform Mr. Chester and Captain Tyson that they must come with their boats back on board as early as possible. The ship then returned to Providence Mount.

30th.—We succeeded by great labor, in fishing the anchor which had now been lying on the bottom for nine months and had imbedded deeply into the mud.

July 1st.—We set Captain Hall's grave in order, covering it with stones, so that the earth could not be blown off, and planting a sign-board with the name cut in. That was the last we could do for our beloved commander.

At 8 p. m. Dr. Bessels returned with Hans from Newman's Bay. They had a hard travel for twenty-seven hours, having searched long in a ravine for a place where they could climb up, but with great difficulty. Mr. Chester, having besides Mr. Meyer only two men, was anxious that another should be sent him; but Captain Buddington thought the land-route to be now too dangerous, as the water had begun to pour powerfully from the mountains into the great ravine. He preferred another attempt to reach the party with the ship, starting at midnight under steam and sail.

At 1 o'clock the wind changed to a gale from the N., and at 2 p. m., not having made half the distance, we came to the border of ice, which, closely packed, was drifting against us. The coast was there too steep to climb it. We set sail, and permitted the vessel to drift. At noon of the following day we were off the ravine where Hans had been landed before. As one man could not go well alone, I was sent with him. Considerable snow was still lying on the mountains. We landed at 1 p. m. with a small sleigh for transporting the bread, fuel, and other small things which the party was in need of, but we had not gone the third part of the distance when the sleigh broke, and we were compelled to carry each

sixty to seventy pounds on our backs over the steep mountains and through the deep ravines. It was the most trying travel I ever had in my life. In some of the ravines the water reached almost to our arm-pits, and we had then to climb up their sides on our hands and knees; but with God's aid we reached, at 4 o'clock in the morning of Thursday, the 4th of July, safely, the boat, after thirty-nine hours, during thirty-eight of which I had no dry foot. Since we had left them they had no chance to move either north or south. We carried a letter of Captain Buddington to Mr. Chester, in which the former stated that if, after consultation with Captain Tyson, they chose to continue their attempt of pushing north in the boats he was not the man to prevent it, but in his opinion it was preferable that they should return on board, as there was better prospect to push on north in the steamer, should a chance offer, than in the boats; we would then be able to free the ship from the water by the hand-pumps instead of the pumps connected with the engine, the coals for which were almost exhausted.

July 5th.—Mr. Chester was anxious to reach in the boats at least the 83d degree of latitude, from whence he intended to proceed farther with the sleighs on Grinnell Land, which extended north; but Captain Tyson preferred to go on board, after securing his boat and stores on the southern coast of Newman's Bay in a ravine, one and a half miles inside of Cape Sumner. It took from Friday, 11 a. m., to Saturday, 9 p. m., to move the boat with the stores to the place selected by Captain Tyson, in which two men narrowly escaped drowning. Having thus secured the boat, Captain Tyson's party went overland on board. In the succeeding night rain fell some hours, for the first time in 1872.

10th.—At 4 p. m. the ice opened a little to the southward, and Mr. Chester concluded to take advantage of it for going on board, as there appeared to be now no chances whatever for proceeding north in the boat. At 6 p. m. the boat was pushed into the water, and we started, but had hardly rowed two and a half miles when we were compelled, on account of the drift-ice besetting us again closely, to draw the boat on a small ice-field.

13th.—There being no prospect that the ice would soon open and allow us to proceed, Mr. Chester deemed it advisable to land the boat and stores by the sleighs and take us on board overland. At 2.30 p. m. everything was on the sleighs, and we started. The wind increased and, together with the roughness of the ice, made progress so difficult that it became necessary to lighten the sleighs; we dropped the sleeping-bags and some clothing. When half a mile from the shore, we left the sleighs in order to get the things which we had dropped, and land them first. An hour after midnight, at last, we reached the land at Captain Tyson's boat, thoroughly wet and almost broken down. To save the sleigh and boat now was impossible, as it blew so violently, with snow and rain squalls, that at times we could hardly keep on our feet. We pitched the tents of Captain Tyson, took a scanty meal, and lay down. But soon the tents were blown away. We then lay down in the boat, which had a canvas cover. There was, however, but little rest for us, as in the morning (14th) the boat, with everything in it, we included, was, by a terrible squall, carried a distance over the ground and thrown against rocks, by which two planks were broken, so that it now had a great hole in the bottom. We quickly jumped out to secure it, but it was caught by another gust and turned bottom up. By drawing a line several fold around the boat and fastening the ends to heavy rocks we finally succeeded in securing it. A quantity of clothing and light things, however, had been blown into the water. We then carried the tents a distance into the ravine, where we pitched them under the lee of the cliffs, and could now, at 9 p. m., seek the rest we so badly needed.

15th.—During the night, the ice had parted entirely from the coast, so that we could not get at our boat and the sleigh.

16th.—We tried in vain to reach the boat. As there was no chance for it before the wind would veer round to the north and set the ice again to the shore, Mr. Chester directed Meyer, Jamke, and Kruger to go on board, while he and I remained to save the boat, if possible, with the Lord's will.

17th.—Mr. Chester and I went along the coast trying to

find a place where we could get to the boat. At Cape Summer, we at last espied a chance and succeeded happily, although with great danger, in crossing the broken ice and reaching the field upon which our boat was still standing; at 6 p. m. it was safely on the shore.

July 22d.—As the strait continued to be beset by ice, and our provisions began to fail, Mr. Chester concluded to go with me on board the ship, leaving the boat, with its contents, where it now was. We reached the ship at 11.20 p. m.

In consequence of the great pressure of the packed ice, which had, by the southwesterly gales, been driven in great quantities into Polaris Bay, Providence Mount had, on the 20th during the flood-tide, parted, and the broken pieces had pressed the vessel upon the strand, where at low water she had been lying so much on one side that the water almost reached the deck. But when we came on board she had, with God's help, been floated again, and appeared not to have been damaged by it.

25th.—In the afternoon Captain Buddington disconnected the pumps of the engine and divided all hands, the women and children excepted, into three watches, each of four hours, for pumping by hand. But after having been ashore she made not so much water by far as previously, some of the parted seams having probably closed again.

August 12th.—In the morning, the wife of Hans gave birth to a boy.

In the afternoon the ice began to loosen and some strips of open water appeared. At 4.40 p. m. the vessel left Polaris Bay with northerly wind. We worked during the succeeding night, with great difficulty, through the ice until 8 a. m. of the next day, when we were compelled, by the density of the ice, to fasten the vessel to a large floe near a small island on the Grinnell Land side. We were now without ground-tackle. The boats left at Newman's Bay we missed very badly. We drifted that day with the ice slowly to the southward, there being no wind, and the weather beautiful. In the night, when we saw near us a strip of open water which appeared to extend several miles to the southward, we made

repeated attempts, with the full power of the engine, to break through the ice surrounding us, but could not succeed, and had to tie the vessel up again.

14th.—At 2 p. m. we passed Cape Constitution, in latitude $80^{\circ} 30'$ N., and worked steadily on until 11.30 p. m., when the ice had closed in again, and nothing remained but to tie up to an ice-field.

18th.—We still lay tied to the same floe to which we had fastened on Wednesday; beset by heavy ice in which no opening was visible.

21st.—At noon the fires were drawn, as both boilers leaked and had to be repaired. We had now to work the pumps by hand, the ship making twice as much water as in Polaris Bay, as she had received many hard knocks since we left.

27th.—We had now for some days been almost stationary, probably because the ice had packed in the narrow part of Smith's Sound. In the evening the ship was towed between the fields about a quarter of a mile.

29th.—Beautiful calm weather. In the evening we again saw a large stretch of open water. The fires were instantly lighted, and we labored throughout the night with the full power of steam, and besides all hands outside the vessel on the ice, but could only carry the ship within about one hundred and fifty yards of the open water, where, at 5.30 a. m., we were compelled to tie her up again.

September 5th.—We tried to stop the leaks of the vessel without success.

30th.—There were this morning quite a number of open places north and south of the ship, and also near her the ice began to work with great noise; but the fields still incasing her prevented us from reaching the opening to the southward. Since August 15, when we tied up the ship to the ice in latitude $80^{\circ} 02'$ N., we had drifted, in one and a half months, 60 miles to the southward.

2d.—We were about twenty-three miles N. W. of Kane's winter-quarters, and could see the harbor plainly in a clear sky. The ice still very unquiet.

October 3d.—Began to erect a house on the ice-field to

which the ship was fastened, as the latter was in great danger of being crushed, and, moreover, the winter now approached fast.

7th.—Mild, with light northerly breeze. Worked on the house, and carried ice into the ship, which Mr. Schumann intended to use for the small boiler working the pumps, as the salt water had crystalized in it to a great extent. In the afternoon Joe shot a seal and discovered that he had been tracked the day before close to the ship by a polar bear, which the dogs had not scented, the wind being against them; they are generally very keen in this respect.

9th.—We carried a store of bread into the house. In the afternoon one of the crew saw a polar bear between the ice-fields, at a distance of a mile from the ship.

12th.—We had a gale from the N. E., with cold temperature. Much open water. Drifted more rapidly to the south. We were now about three miles from the coast of Greenland.

CHAPTER XLVII.

JOHN HERRON'S DIARY.

John Herron, steward of the *Polaris* Expedition, was one of the party separated from the ship and subsequently rescued by the *Tigress*. Mr. Herron kept a journal of the incidents and experiences of the ice drift, which extended from October 15th, 1872, to the ensuing May, and it is in every respect highly creditable to him. All the important and interesting portions of this document are given below :

October 15. Gale from the S. W. ; ship made fast to floe ; bergs pressed in and nipped the ship until we thought she was going down ; threw provisions overboard, and nineteen souls got on the floe to receive them and haul them up on the ice. A large berg came sailing down, struck the floe, shivered it to pieces, and freed the ship. She was out of sight in five minutes. We were afloat on different pieces of ice. We had two boats. Our men were picked up, myself among them, and landed on the main floe, which we found to be cracked in many places. We remained shivering all night. Saved very little provisions.

Oct. 16. The berg that did so much damage half mile to the N. E. of us. Plenty of open water. We lost no time in launching the boats, getting the provisions in, and pulling around the berg, when we saw the *Polaris*. She had steam up, and succeeded in getting a harbor. She got under the lee of an island, and came down with sails set—jib, foresail,

mainsail, and staysail. She must have seen us, as the island was four or five miles off. We expected her to save us, as there was plenty of open water, beset with ice, which I think she could have gotten through. In the evening we started with the boats for shore. Had we reached it we could have walked on board in one hour, but the ice set in so fast when near the shore that we could not pull through it. We had a narrow escape in jumping from piece to piece, with the painter in hand, until we reached the floe. We dragged the boat two or three hundred yards, to a high place, where we thought she would be secure until morning, and made for our provisions, which were on a distant part of the floe. We were too much worn out with hunger and fatigue to bring her along to-night, and it is nearly dark. We cannot see our other boat or our provisions. The snow-drift has covered our late tracks.

Oct. 17. Strong wind from the S. E. The ice broke up again. Our boat and everything we have left are going. We are afloat on a very small piece, with very little provisions left. It is blowing a gale and threatens to be a very severe night.

Oct. 21. Building snow houses; finished one; we sleep in it to-night.

Oct. 22. Weather very thick; snow falling. Building snow-houses for the Esquimaux, and one more for ourselves, as the first is too small.

Oct. 23. With the aid of our marine-glass, to our great joy, we discovered in the distance a boat, and at some distance therefrom, the tent. The ice for a few miles between us and the floe which they are on is very thin, but we must risk it, as we have six bags of bread there, forty-five pound-cans of pemmican, and two dozen cans of meat. Returned to headquarters weak, but thankful to God. Rejoicing in our good fortune, we treated ourselves to a good supper, thanking God for our increase in stores.

Oct. 24. Four men made another trip to the tent to bring some planks with which to make a sleigh.

Oct. 25. Half of the men have gone to the tent with the sled made this morning, drawn by the dogs. The rest of us are remaining here by the boat ready to shove off in case the ice should open. Evening the men returned with a sled-load of poles. All well.

Oct. 29. This morning very cold and stormy, but clear. The land in sight all the time. We have got our cook-house at work. All well.

Oct. 31. Sent Joe and Hans with a dog-team to see how the ice will stand, as we intend starting to-morrow for shore. We have eaten as much as we could to-day to get strength for the journey. We have been living very poorly so as to make our provisions last six months.

November 1. Started to-day for the large floe four miles distant, and one-third of the distance, I should say, to the shore. After a hard day's work we succeeded in getting two boats and our provisions off, also one sleigh-load of bed-covering, skins, and canvas, and some poles; leaving three bags of coals, the only ones we have left.

Nov. 2. This morning we were surprised to find the ice open all around us. We started before daylight with the dogs and sled, not knowing what had happened until we had nearly driven into the water.

Nov. 3. This morning snow-storm. Building snow-houses. All well. No chance now of getting ashore; must now give that up.

Nov. 6. Joe caught a seal, which has been a godsend. We are having a feast to-night, three-fourths of a pound of food being our allowance. Mr. Meyer made a pack of cards from some thick paper, and we are now playing euchre. Plenty of water around us. We are a good deal further from the land, and are drifting south pretty smart.

Nov. 10. Wind strong; snow drifting. We are drifting fast to the south. The west land is not to be seen. The Esquimaux are out hunting. Joe has returned late; Hans has not come yet. Joe and Robert have gone in search of him. He had left the floe for another one, and with great

difficulty found his way back very late. They saw him coming, dressed in skins and covered with snow, and took him for an ice-bear; loaded their pistols and made ready, when, to their joy, they found it was Hans.

Nov. 16. Calm, but thick. Joe saw three seals yesterday, and a fox-track, but got nothing. We have nothing to feed our dogs on; they got at the provision to-day; we shot five, leaving four; shot some two weeks since. Lining our new hut with canvas.

Nov. 21. The natives caught two seals; they shot three, but lost one of them in the young ice. We moved into our new house to-day. We shot two dogs—they got at our provisions; we have two left.

Nov. 28. Thanksgiving to-day; we have had a feast—four pint-cans of mock-turtle soup, six pint-cans of green corn, made into scouch. Afternoon: three ounces of bread and the last of our chocolate; our day's feast. All well.

December 1. Calm, but little light. This month out and we can hope for the best, as daylight will begin to come upon us. Fred saw the bear to-day, but being alone dared not go for him.

Dec. 2. Boiled some seal-skin to-day and ate it—blubber, hair, and tough skin. The men ate it; I could not. The hair is too thick, and we have no means of getting it off.

Dec. 5. The fox came too near to-day; Bill Lindemann shot him; skinned and cut him up for cooking. Fox in this country is all hair and tail.

Dec. 6. The poor fox was devoured to-day by seven of the men who liked it; they had a mouthful each for their share; I did not think it worth while myself to commence with so small an allowance, so I did not try Mr. Fox.

Dec. 7. If we keep on this way we will be off the island of Disco in March. All in good health. The only thing that troubles us is hunger; that is very severe. We feel sometimes as though we could eat each other. Very weak, but please God we will weather it all.

Dec. 13. Hans caught a small white fox in a trap yesterday. The nights are brilliant, cold, and clear. The scene is charming, if we were only in a position to appreciate it.

Dec. 20. Joe found a crack yesterday, and three seals. Too dark to shoot. It is a good thing to have game underneath us. It would be much better to have them on the floe, for starving men. To-morrow will be our choicest day—then the sun returns.

Dec. 21. To-day clear ; light wind. The shortest day, so cheer up ! In three weeks we will have daylight. Then we hope to catch game.

Dec. 22. Calm and clear as a bell ; the best twilight we have seen for a month. It must have been cloudy, or we are drifting S. fast. Our spirits are up, but the body weak ; 15° below zero.

Dec. 25. This is a day of jubilee at home, and certainly here for us ; for, beside the approaching daylight, which we feel thankful to God for sparing us to see, we had quite a feast to-day.

Dec. 29. Joe shot a seal, which is a godsend, as we are pretty weak. It is breezing up strong. We have had a good supper ; thank God.

January 1, 1873. Cloudy ; no water ; 29° below zero. Poor dinner for New-Year's Day—mouldy bread and short allowance.

Jan. 3. Twenty-three degrees below zero ; very cloudy ; strong wind ; cannot leave the hut.

Jan. 5. To-day fell in with two bear-tracks, but cannot find them. If we could kill one of these fellows it would set us all right.

Jan. 7. Light wind. Mr. Meyer took an observation last night ; latitude 72° 7' ; longitude 60° 40' 45". The news was so good that I treated myself to an extra pipe of tobacco at 12 o'clock last night. The tobacco is getting very short, so that I have to be very saving this month. We are obliged to cook our meals with a lamp—pretty slow work. Good northern lights last night.

Jan. 8. Light wind; 29° below zero. No water yet. Hans's little boy has been very poorly for some time back. I hope he will get better soon.

Jan. 15. Blowing a gale. Snow drifting very badly. Our dogs had an encounter with two bears. One of the dogs got cut when some distance from the floe.

Jan. 16. No wind; very thick. The glass ranges from 26° to 31° below zero. Hans caught a seal to-day; thank God! for we were very weak. Our light would have been finished to-morrow, and our cooking also. But God sent this seal to save us; thanks to His holy name! It has been so all the time. Just as we were played out something came along. I am afraid I have a touch of the scurvy. A little raw meat will drive it out, I hope. Hans's boy is no better. I hope it will do him good also.

Jan. 19. Clear; light wind; 39° below zero. The sun has made his appearance to-day. I gave him three cheers, hoping we may be able to start a month from now. Thank God for this day! we have long wished to see it. The sun has brought us luck in the way of a seal Joe caught. The finest display of northern lights that I ever saw came off to-night. They had to go about six miles to-day to open water, where they saw many seals.

Jan. 20. We have not seen the E. shore yet. I hope to see the island of Disco; the land is very high there, but I am afraid we will drift past it. We cannot help ourselves, however. We are in the hands of God, and I am thankful. Hans shot a dovekie. I hope he will give it to his boy.

February 4. A gale from the W.; very thick snow-drift. I seldom see it snow here, for when it is blowing hard the snow comes like flour with the wind. Whether the snow falls or the wind takes it up from the ice I cannot tell, but it is so fine and thick you cannot see. There is no leaving the hut in such weather, as the snow is always either drifting or falling with the blow, no matter from what quarter. Then there is no going out, as it fills the ice and will penetrate almost anything. The temperature to-day has been from 16°

to 10° below zero. All are well, thank God, but me. I have a slight touch of the scurvy, and feel very ailing, but, please God, it will soon leave me.

Feb. 14. Very strong wind; thick, and snow drifting. We are having a long spell of bad weather. Hans caught a seal to day, which will give us another meal. Saw a fox to-day near the huts, but not near enough to get a shot at him. Joe hit three unicorns to-day, but I am afraid our chance to get one is small.

Feb. 16. Saw plenty of whales: wish they would take their departure; they frighten the seals away which we are now so badly in want of; our provisions are getting very low. When you take a glass and look round, you see the ice in the distance piled up as high as a ship's mast, so that it seems impossible to travel over it—certainly not with a boat—and no land to be seen yet. We want water to escape, and, please God, we will get it when the time comes. All well.

Feb. 19. The welcome cry this morning was "Land ho!" to westward, Cape Walsingham.. Now we will be out of the narrows. The straits commence to widen here so that we can travel S. fast if we cannot reach land.

Feb. 20. Water around; cannot see land. The seals are very scarce here. We must soon get a good lead of water running in-shore, and so escape, or kill plenty of seals to live on, else our time in this world will be short. But God's will be done.

Feb. 24. Land is twenty miles off, I should say, and we appear to be leaving it. My advice is to start for it—making a sleigh out of some spare skins, loading it with provisions and clothing, and the kayak to ferry us across the cracks; also, ammunition for hunting purposes when we get on shore. By that means we could leave the boat and travel light, for it is my opinion that we will never get the boat over the ice any distance. We seem to have left the sealing-ground. We cannot catch anything to speak of, and we have only three weeks' provisions left. Captain Tyson and some of the men are afraid to venture in-shore, and unwilling to leave the

boat; so we have made up our minds to stay, come down in our provisions, and trust in God, hoping we may drift on a better sealing-ground, and thus live through it. I asked the Esquimaux's opinions about it—what they would do if they had not us to influence them. They told me they would start for land directly they saw it. They do not like to speak their minds openly for fear something might happen—meaning they would be blamed for it; so they are silent, following only the advice and opinions of others. Joe is very much to be praised, also his wife Hannah. We may thank them and God for our lives and the good health we are in. We could never have gotten through this far without them. If we ever get out of this difficulty, they can never be paid too much. Joe caught a very small seal, which makes the eighth this month. Northern lights very brilliant to-night. All well.

Feb. 26. A crack of water to the E. Land to be seen. We are coming down on our provisions one-half; that is as low as we can come and keep life, and will be a few ounces a day.

March 1. We are drifting S. fast; can just see the mountains in the N. W. Sometimes Peter favors us with a sailor's yarn when we lie down at night; that is, when we have had a meal of seal-meat. All other nights we are quiet enough.

March 2. Splendid display of northern lights these last two nights. To-day God has sent us food in abundance. Joe shot an oogjook, one of the largest kind; plenty of meat and oil; and forty-two dovebies. It took all hands to drag him home. That was a good Sunday's work; dragging the fine fellow to the hut, and thanking God for His mercies. Begins to breeze up, and the snow drifts pretty lively. All well and happy.

March 5. Blowing a gale from the N. W. Snow drifting; cannot get out. Joe went out in the last blow; it seems to me he cannot stay in; he is a first-rate fellow; we would have been dead men long since had it not been for him.

March 7. The gale abated this morning. Stiff breeze yet, and snow drifting. Immense icebergs all around the floe. There was a fearful noise all last night, which kept us awake. The floe was cracking, splitting, and working in the most fearful manner, just like a park of artillery and musketry. I expected to see it split into a thousand pieces every moment. I feel very bad yet in my head and stomach. The liver of bear and oogiook, they say, is very dangerous to eat. But what is a hungry man to do?

March 11. Blowing a strong gale yet. All hands were up last night and dressed, ready for a jump, for the ice was splitting, cracking and making a fearful noise all night. To-day has been a fearful day—cannot see, for snow-drift. We know the floe is broken into small pieces. We are afloat—jumping and kicking about. This is not very pleasant. My hope is in God.

March 12. Last night was a fearful night of suspense—ice creaking and breaking; the gale roaring, and the water swashing. But where? We know it is around us, but cannot see anything. Since one o'clock this morning the wind has been going down, thank God, and now I can see around. A nice picture! Everything broken up into small pieces; the best piece we are on. The houses are nearly covered. Afternoon: It has calmed down to a fine day, with a light breeze.

March 17. Saw a bear this morning, and gave chase, before six o'clock. After a very exciting run of over two hours, he got over a large space of water, and we had to give him up. Saw a whale and three seals, but got nothing.

March 26. Water three miles off. Joe caught four seals to-day and Hans one—the first of the kind; they call them bladder-nose; they are buggers to fight. I do not know how far S. we shall have them; we have just struck their ground. They are splendid seal—much larger than the others. It is very dangerous going out so far; the ice is so weak, and it is so near spring-tide.

March 27. Went out to-day to the old place, but was forced to come back. Esquimaux and all pretty lively. It is so dangerous we will have to wait until after spring-tide. A very agreeable surprise to-night, while at supper. A bear came to the hut. Of course, he died; we buried him in the snow until morning.

March 28. Skinned and cut up the bear; he is a fine young one, very tender and fat, weighing, I should say, 700 or 800 pounds. We are making some sausages from him, which are very good, I think. I think it is the sweetest and tenderest meat I ever ate. The fat cuts like gelatine.

March 29. Has been blowing very hard since last night, and is doing so yet. Surrounded with large bergs; the ice broken up; water all around. Never saw so many icebergs; we are completely hemmed in by them. Do not know what distance we are from land. Nothing to be seen but the old sight—icebergs, floes, and water.

March 30. Blowing a gale from W. N. W.; it looks fearful. Last night the sight was dreadful. I went out, and there, within ten or twelve yards of the door of our hut, was a very large and ugly-looking iceberg grinding against us. Our little floe gets smaller in open water. To-day we had the pleasure of launching the boat. We saw on a piece of ice a large seal; we fired and thought we hit him. When we had pulled there with the boat, we found a large bladder-nose and her pup. She showed fight, but was soon killed, and, with her pup, towed to our floe. The buck was shot, but got under the young ice.

March 31. We are nearly off Cape Farewell. Last night, ran a very heavy sea; not a bit of ice to be seen as far as the eye could reach. To-day closed around a little, but plenty of water. Dare not venture in our open boat; we must watch and wait and trust in God.

April 1. A fearful night, last night. Cannot stay on our floe; must leave it at once. Got under way at 8 A. M.; the boat taking in water. Loaded too deep. Threw overboard one hundred pounds of meat; must throw away all our

clothes. Cannot carry anything but the tent and a few skins to cover us with, a little meat, and our bread and pemmican. We landed to lighten our boat; pitched our tent, and intend stopping all night.

April 2. Lovely last night. The floe lost several pieces. I could not sleep for two reasons: the ice breaking up, and too cold. Started at 5⁰ A. M. Worked the oars for two hours, then a breeze sprang up and increased until it blew almost a gale. We made several narrow escapes with our boat before we could find a piece of ice safe enough to land on, and when we did she was making water fast. When emptied, we found a hole in her side, which we are repairing this afternoon. We are in a very bad fix.

April 3. Repaired our boat, and started. Pulled three hours, when a breeze sprang up from N. N. W. We kept under way until 2:30 P. M., when we had to haul up on a piece of a floe. We were beset by the ice and could not get through; so we encamped for the night.

April 5. Blowing a gale and a fearful sea running. Two pieces broke from the floe. We are on one close to the tent. At 5 A. M. removed our things to the center. Another piece broke off carrying Joe's hut with it; luckily it gave some warning, so that they had time to throw out some things before it parted. A dreadful day; cannot do anything to help ourselves. If the ice break up much more, we must break up with it; set a watch all night.

April 6. Blowing a very severe gale. Still on the same ice; cannot get off. At the mercy of the elements. Joe lost another hut to-day. The ice, with a roar, split across the floe, cutting Joe's hut right in two. We have but a small piece left. Cannot lie down to-night. Put a few things in the boat and now standing by for a jump; such is the night.

April 7. Still blowing a gale, with a fearful sea running. The ice split right across our tent this morning at 6 A. M. While getting a few ounces of bread and pemmican, we lost our breakfast in scrambling out of our tent, and nearly lost our boat, which would have been worse than losing ourselves.

We could not catch any seal after the storm set in ; so we are obliged to starve for a while, hoping in God it will not be for a long time. The worst of it is, we have no blubber for the lamp, and cannot cook, or melt any water. Everything looks very gloomy. Set a watch ; half the men are lying down, the others walking outside the tent.

April 8. Last night, at 12 o'clock, the ice broke again, right between the tent and the boat, which were close together, so close that a man could not walk between them. There the ice split, separating the boat and tent, carrying away boat, kayak, and Mr. Meyer. There we stood, helpless, looking at each other. It was blowing and snowing, very cold, and a fearful sea running. The ice was breaking, lapping, and crushing. The sight was grand, but dreadful to us in our position. Mr. Meyer cast the kayak adrift, but it went to leeward of us. He can do nothing with the boat alone, so they are lost to us unless God returns them. The natives went off on a piece of ice with their paddles and ice-spears. The work looks dangerous ; we may never see them again. But we are lost without the boat, so that they are as well off. After an hour's struggle, we can make out, with what little light there is, that they have reached the boat, about half a mile off. There they appear to be helpless—the ice closing in all around—and we can do nothing until daylight.

Daylight at last—3 A. M. There we see them with the boat ; they can do nothing with her. The kayak is the same distance in another direction. We must venture off ; may as well be crushed by the ice and drowned as to remain here without the boat. Off we venture, all but two, who dare not make the attempt. We jump or step from one piece to another, as the swell heaves it and the ice comes close together—one piece being high, the other low, so that you watch your chance to jump. All who ventured reached the boat in safety, thank God, and after a long struggle we got her safe to camp again. Then we ventured for the kayak, and got it also. Mr. Meyer and Fred Jamkins fell into the water.

Luckily, we had two or three dry shirts left, so that they could change. Most every man is more or less wet. Have taken our tent down and pitched it on the middle of our little piece of ice, with our boat alongside. Joe has built another hut alongside the tent.

April 9. The sun has shown himself for a few minutes. Mr. Meyer shot him; latitude $55^{\circ} 51' N$. The sea runs very high threatening to wash us off every minute. We are in the hands of God; may He preserve us. The ice is much slacker, and the water is coming nearer. Things look very bad. God knows how the night will end. Evening: Washed out of our tent; Hannah from her snow-hut. Have gotten everything in the boat ready for a start; she can never live in such a sea. The sun has set very good. Land in sight. It has cheered us up. The women and children are in the boat. We have not a dry place to walk about nor a piece of fresh-water ice to eat. The sea has swept over all. The ice is closing in fast; the wind and sea going down.

April 12. We are still prisoners, the ice close. Saw some seals, but could not get them. Very hungry, and likely to be so.

April 14. Our small piece of ice is wearing away very fast; our little provisions are nearly finished. Things look very dark; starvation very near. My trust is in God; He will bring us through. All well.

April 16. The ice still the same; no swell on. My head and face have been swollen to twice their usual size. I do not know the cause of it, unless it is the ice head-pillow and the sun. We keep an hour's watch at night. Some one has been at the pemmican on their watch, and I can put my hand on the man. He did the same thing during the winter, and on the night of the 7th I caught him in the act. We have but few days' provisions left. The only thing that troubles me is the thought of cannibalism. It is a fearful thought, but may as well be looked boldly in the face as otherwise. If such things are to happen we must submit. May God save us!

April 17. We shot the dogs last winter for stealing the provisions. If I had my way, with the consent of all hands, I would call out and shoot down that two-legged dog, who has since been at them. I see most of the men have their faces swollen, but not so badly as mine. All well, but growing very weak.

April 18. Joe saw a small hole of water half a mile off. He took his gun and ventured over the loose ice. No sooner had he gotten there than he shot a seal, and sang out for the kayak, as the water made rapidly. It is a nice-sized seal. A joyful sight met our view this morning when we turned out—the land in sight, bearing S. W. We returned thanks to God for His mercy and goodness to us. We divided the seal very nicely into sixteen parts. One man then turned his back, and called out the names, each man stepping up and taking his share.

April 20. Blowing a gale somewhere. The swell is very heavy. The first warning we had—the man on watch sang out at the moment—a sea struck us, and, washing over us, carried away everything that was loose. This happened at 9 o'clock last night. We shipped sea after sea, five and ten minutes after each other, carrying away everything we had, our tent, skins, and most of our bed-clothing, leaving us destitute, with only the few things we could get into the boat. There we stood from 9 in the evening until 7 next morning, enduring, I should say, what men never stood before. The few things we saved, and the children, were placed in the boat. The sea broke over us during that night and morning. Every fifteen or twenty minutes a sea would come, lift the boat and us with it, carry us along the ice, and lose it strength near the edge, and sometimes on it. Then it would take us the next fifteen minutes to get back to a safe place, ready for the next roller. So we stood that long hour, not a word spoken but the commands to "Hold on, my hearties, bear down on her, put on all your weight;" and so we did, bearing down and holding on like grim death. Cold, hungry, wet, and little prospect ahead. At 7 o'clock there

came close to us a small piece of ice, which rode dry, and we determined to launch the boat and reach it, or perish. The cook went overboard but was saved. Landed there in safety, thank God. All well. Tired and sleepy.

April 21. Last night and yesterday all hands wet. Nothing dry to put on to-day. There is little to dry, but we have stripped off everything we can spare, and are drying them. The men are divided into two watches, sleeping in the boat and doing the best we can. Hunger disturbs us most.

April 22. Weather very bad. It appears to me we are the sport and jest of the elements. The other night they played with us and our boat as though we were shuttlecocks. Men would never believe, nor could pen describe the scenes which we have passed through, and yet live. Here we are, half drowned, cold and with no means of shelter. Everything wet and no sun to dry them. The scene looks bad ; nothing to eat. Everything finished if some relief does not come along. I do not know what will become of us. Fearful thoughts enter my head as to the future. Mr. Meyer is starving ; he cannot last long in this state. Joe has been off on the ice three times to-day, the little way he can get, but has not seen anything. Chewed on a piece of skin this morning that was tanned and saved for clothing ; rather a tough and tasteless breakfast. Joe ventured off on the ice the fourth time, and after looking a good while from a piece of iceberg, saw a bear coming slowly toward us. He ran back as fast as possible for his gun. All of us laid down and remained perfectly still, Joe and Hans going out some distance to meet the bear. Getting behind a hummock, they waited for him. Along came Bruin, thinking he was coming to a meal instead of furnishing one himself. Clack, bang went two rifles, and down went Bruin to save a starving lot of men. The Lord be praised ; this is His heavenly work ! We cannot catch seal for the pack-ice, and we are on a bad sealing-ground. He therefore sends a bear along where bears are seldom seen, and where we certainly never expected to find one. The

poor bear was hungry himself; there was nothing in his stomach. Joe, poor fellow, looked very much down on our account. Everything looks bright again but the atmosphere; it looks threatening.

April 25. Wind increased to a gale last night from the N. E. Raining all night and to-day, with snow-squalls. Launched the boat at 5 A. M. The case was desperate; running with a light-built boat, damaged as she is, patched and scratched all over. But what were we to do? The piece of ice we were on had wasted away so much it would never ride out the gale. Our danger to-day was very great; a gale of wind blowing; a crippled boat overloaded; and a fearful sea running, filled with small ice as sharp as knives. But, thank God, we came safely through it. We are all soaking wet, in everything we have, and no chance of drying anything. We have had neither sun nor moon for over a week. Not a single star have I seen. All is dark and dreary, but, please God, it will soon brighten up. We have struck the sealman's grounds. I never saw such an abundance of seals before; they are in schools like the porpoise. We hauled up on a floe after eight hours' pull; could make no westing. Shot some seals, but they all sunk; Joe shot them. Hard times.

April 26. Joe shot a seal last evening and broke the charm. Hans shot one this morning. Ice very thick around. Started at 6.30 A. M., and were beset two hours afterward. Pulled up on a small piece of ice; the best we could find. Snowing all day. Repaired the boat here, which it wanted, and the weather cleared up in the afternoon. Got some things dried a little, and half of us turned in.

April 28. Gale of wind sprang up from the W.; heavy sea running; water washing over the floe. All ready and standing by our boat all night. Not quite so bad as the other night. Snow-squalls all night and during the forenoon. Launched the boat at daylight, but could get nowhere for the ice. Heavy sea and head-wind; blowing a gale right in our teeth. Hauled up on a piece of ice at 6 A. M., and had a few hours' sleep, but were threatened to be mashed to

pieces by some bergs. They are fighting quite a battle in the water, and bearing right for us. We called the watch, launched the boat, and got away, the wind blowing moderately and the sea going down.

4:30 P. M. Steamer right ahead, and a little to the N. of us. We hoisted the colors, pulled until dark, trying to cut her off, but she does not see us. She is a sealer, bearing S. W. Once she appeared to be bearing right down upon us, but I suppose she was working through the ice. What joy she caused! We found a small piece of ice and boarded it for the night. Night calm and clear. The stars are out the first time for a week, and there is a new moon. The sea quiet, and splendid northern lights. Divided into two watches, four hours' sleep each. Intend to start early. Had a good pull this afternoon; made some westing. Cooked with blubber-fire. Kept a good one all night, so that we could be seen.

April 29. Morning fine and calm; the water quiet. At daylight sighted the steamer five miles off. Called the watch, launched the boat and made for her. After an hour's pull gained on her a good deal; another hour and we got fast in the ice; could get no further. Landed on a piece of ice, and hoisted our colors from an elevated place. Mustered our rifles and pistols, and fired together, making a considerable report. Fired three rounds and was answered by three shots, the steamer at the same time heading for us. He headed N., then S. E., and kept on so all day. He tried to work through the ice, but could not. Very strange; I should think any sailing-vessel, much less a steamer, could get through with ease. We fired several rounds and kept our colors flying, but he came no nearer. He was not over four or five miles distant. Late in the afternoon he steamed away, bearing S. W. We gave him up. In the evening he hove in sight again, but farther off. While looking at him, another stranger hove in sight, so that we have two sealers near, one on each side of us, and I do not expect to be picked up by either of them.

April 30. Five A. M.; weather thick and foggy. Glorious sight when fog broke; a steamer close to us. She sees us and bears down on us. We are saved, thank God! We are safe on board the Tigress, of St. John's, Captain Bartlett. He says the other steamer could not have seen us, as the captain is noted for his humanity. The Tigress musters one hundred and twenty men, the kindest and most obliging I have ever met. Picked up in latitude $53^{\circ} 35' N$.

May 1. Weather very fine. Going north, sealing. The steamer we saw on the 29th was the Eagle, of St. John's, Captain Jackmann, noted for his humanity in saving life. He has received two medals for saving life. The captain of this steamer says that if that man had seen us, and could not have gotten to us with the steamer, he would have sent his men on the ice and carried us off. Joe is in his glory, shooting seals. We are getting on first-rate, eating and sleeping.

May 2. The crew on board this steamer, one hundred and twenty in number, are like a band of brothers. They are all Newfoundland men, and are very kind to each other. No wrangling there; a new thing on board ship.

May 3. Blowing fearfully all night, and continues to do so. These steamers must be very strong; they endure great punishment. She is in the ice getting knocks that one would think would go right through her, but the men seem to think nothing of it. We are treated with the greatest kindness by them; they never think they are doing enough for us.

May 4. Surrounded in the ice. Gale continued last night and this morning; lost its force at noon. Had divine service to-day—the first we have had since Captain Hall's death. We had some of the bear-meat left when the steamer came along; so the bear saw us out of danger and the Tigress took us from it.

May 5. The steamer beset in the ice. A man from aloft saw a large number of seals, some four or five miles off. All hands over the side, and made for them. The captain's son no sooner arrived there and fired the first shot than the cartridge burst, and shattered his hand very badly. Some of the

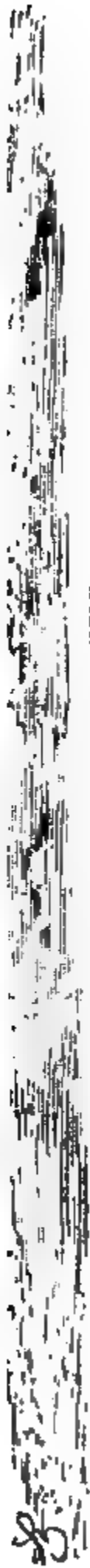
men came back with him, spoiling their work for some time. They killed seven or eight hundred seals before sunset. The steamer could not come to their assistance, so they left them on the ice all night.

May 6. The crew started for their seals at the first streak of day. Nearly all of them were stolen by the other steamers.

May 7. Blowing a heavy gale all night, N. W. Seven A. M., turned her head S., and are running out the ice; looks like going home.

May 8. Will be in St. John's early in the morning, I think 4 P. M. We are going to Bay Roberts first, to land the boats and sealing-gear. Then they will start for St. John's.

May 9. Bay Roberts. Went on shore where we were received very kindly by the inhabitants. The American consul from Harbor Grace, and other gentlemen, came to see us, and were very kind doing all they possibly could. We are getting paid for our sufferings on the ice. It is a very splendid bay, with very neat and comfortable houses. The people are very intelligent and kind.



VIEW ON THE DRIFTING ICE FIELD.

CHAPTER XLVIII.

POLARIS SEARCH AND RELIEF EXPEDITIONS.

(CRUISE OF THE JUNIATA AND TIGRESS.)

THE story told by Capt. Tyson and his companions of the ice-drift, excited deep apprehensions as to the fate of the balance of the Polaris crew, who, in case of the wreck of their ship, had probably gone down with her or were imprisoned on the ice-bound shores of Greenland; and it was resolved by the Secretary of the Navy that one or more vessels should be sent to search for the missing navigators.

As the Secretary had no vessel suitable for this service at his command he purchased, as the most available one, the Tigress—the same steamer which rescued the Polaris party from the ice off the Labrador coast. This vessel was built expressly for sealing, and was particularly adapted for sailing among ice-floes. The price paid for this ship was \$60,000. She arrived at New York on the 28th of June, and the work of preparing her for the proposed trip was immediately commenced at the Brooklyn Navy-yard.

The Secretary also directed that the U. S. steamer Juniata, which had been fitted up to assist in laying a cable from the Bermuda's to the Atlantic coast, should give up that enterprise and be sent to the

Lower Greenland settlements to assist in the search. Preparations for her voyage were speedily made; and with a load of coal and ample provisions, from which she was to supply the Tigress, and the Polaris, if found, she started from New York on the 24th of June. She was manned by one hundred and thirty men and carried two light guns. Besides her own boats, she carried a large steam launch intended for expeditions further north than the Juniata could safely go. The following is a list of the principal officers of the expedition:—

Daniel L. Braine, Commander.

Edgar C. Merriman, Executive Officer.

George W. DeLong, Navigator.

George E. Ide, Edward J. McClelland,

Charles W. Chipp, Lieutenants.

Wm. F. Bulkley, Samuel E. Comley, Sidney H. May, John D. Keeler, Ensigns.

Frederick E. Upton, Master.

J. J. Hunker, Midshipman.

T. C. Walton, Surgeon.

B. F. Rogers, Assistant Surgeon.

T. S. Thompson, Passed Assistant Paymaster.

The Juniata arrived at St. John's on the 30th of June, and after several days of additional preparations for her hazardous trip started for the Greenland coast, and reached Disco Island on the 22d of July. Here a number of sledge dogs were procured, coal for the Tigress landed, and other preparations for that vessel completed. The Juniata then left Disco, July 29th, and reached Upernavik on the 31st.

As Upernavik was as far north as the Juniata could be expected to go, her magnificent steam launch the "Little Juniata," was here put afloat, and thoroughly equipped for a voyage up the coast in search of the missing party. She was commanded on this trip by Lt. DeLong, and her crew consisted of eight volunteers and an ice pilot. She steamed northward on the 2d of August, amid the enthusiastic cheers of the Juniata crew and spectators, and reached Tessuisak at midnight of the same day.

The next morning the Little Juniata was pushed cautiously on, in full view of immense fields of ice and between huge floating icebergs. On the night of the 4th they reached Duck Islands and Wilcox Head, where they were enveloped in a dense fog, and entangled in an ice-pack, through which they escaped to the westward after a twelve hours' struggle with the floes.

Entering Melville Bay on the 6th, they sighted Cape York on the morning of the 8th, and headed towards the land which was capped with a dense fog. Two hours later a gale arose which increased to a frightful tempest, and the launch was for thirty-six hours on the edge of the ice-pack in a dangerous position; as it was impossible to land and no progress could be made to the north, the explorers headed south, and arrived off Tessuisak on the 11th, where they met the Tigress which had arrived on the scene of action.

The steamer Tigress left the Brooklyn Navy-yard for her humane undertaking on the 14th of July, at 5 P. M., amid repeated cheers from the seamen of the "Brooklyn," "Vermont," and other ships. She steamed slowly up the East River toward Long Island Sound, and as she passed the Government battery it fired one farewell shot as a parting salute. Her officers were as follows:—

James A. Greer, Commander.

Henry C. White, Executive Officer.

R. M. Berry, Uriel Sebree, George F. Wilkins, Lieutenants.

George E. Baughman, Paymaster.

J. W. Elston, Surgeon.

George E. Tyson, W. N. Chipman, Ice-masters.

The Esquimaux, Hans and his family were sent home in the Tigress; and Joe accompanied the expedition as interpreter. His wife Hannah, with "Punna," remained at Wiscasset, Maine, where she had

been keeping house for the whole Esquimaux party, who had been sent thither by the Government after the investigation at Washington. The following is a copy of a letter written by her to Mrs. Buddington, at Groton, as published in the *Springfield Republican*. The "old man" refers to Capt. Buddington; his subsequent safe arrival home shows that Hannah is something of a prophetess. The "eight children" means the party under her care.

"WISCASSET, June 22d, 1873.

"Sarah Mother Buddington:—I shall never forget you. I now try to write you. I am well; Joe well; Punna very sick for 34 days, little better now. I like to see you once more. So good to me. I never have time to do anything. Hans's four children here too. I got eight children; no go with them home. October 15, 1872, we come home down on ice. Old man come by-and-by; he well. HANNAH LITO."

The same paper states that Mrs. Buddington visited Hannah at Wiscasset after the sailing of the *Tigress*, and on suggesting to her that she should return to Groton, Hannah with exceptionable Esquimaux thrift replied:—

"What, and leave all these victuals for other people to eat up! No; Punna and I shall stay till it is all eaten."

The *Tigress* reached Disco, via St. John's, on the 4th of August, and joined the *Juniata* at Disco on the 10th. Starting north the next day, the *Tigress* met Lt. De Long returning from his excursion, who boarded the steamer and reported to her commander the route and incidents of his trip. The *Tigress* then steamed on across Melville Bay, and approached Northumberland Island near which the *Polaris* was

reported to have been last seen. This island was closely scrutinized, but no traces of the *Polaris* could be found, nor could Tyson and the Esquimaux recognize it as the locality in which they parted from that ship.

Commander Greer then proceeded northward, and when near Cape Ohlsen—so named from one of Dr. Kane's crew who was buried near by—Capt. Tyson recognized a rock as the one which hid the *Polaris* from the view of the party left on the floe. Soon afterward, at nine o'clock on the evening of the 14th, a sound of human voices was heard in the distance. A boat was instantly lowered and started for the shore amid great excitement, which was mingled with exultation when Greer exclaimed:—

“I see their house ; two tents are clearly perceptible, and moving figures can be seen on the mainland.”

The boat returned in an hour, with the disappointing tidings that Captain Buddington and his party were not on the coast. Commander Greer now went ashore accompanied by Joe as interpreter, and others.

A crowd of Esquimaux consisting of five men, two women and two children, greeted them on their arrival at the shore, and seemed quite intelligent. They said that they came from Pond's Bay on a hunting expedition, and had remained with the Buddington party all winter ; the latter had built two boats, and started south at the time when the ducks began to hatch.

A comfortable wooden house was found, having in it bunks, mattresses, furniture, galley, etc. Provisions, instruments, books and other articles were scattered about in every direction. Articles of value, including fire-arms and the ship's bell, with manuscript mat

ter and a mutilated log-book were taken aboard the *Tigress*. Nothing respecting the departure or destination of the crew could be found. A cairn evidently built by them was examined, but contained only seal-blubber.

The Esquimaux stated that Buddington had given them his ship, but that when the ice broke up in the middle of July, it floated into a cove and sunk. They pointed out the place where it lay in nine fathoms of water with a grounded iceberg above it. These natives had no boats and but little food, and occupied two tents evidently from the *Polaris*. They intimated that they would like to take a trip in the *Tigress*.

This deserted camp of the *Polaris* crew was on the mainland opposite Littleton Island, at the place designated by Dr. Kane as "Life Boat Cove." The place is about sixty miles north of Northumberland Island; the ice-floe party had been mistaken as to the locality of their separation with the ship.

At a quarter past two in the morning, after a halt of only five hours, the *Tigress* started on its return south, and arrived at Godhavn on the 25th, where the *Juniata* awaited her arrival. After taking in coal and supplies, Commander Greer started for Davis's Strait and the Labrador Coast. The *Juniata* steamed for St. John's, and reached there on the morning of Sept. 10th. Here Commander Braine reported by telegraph to the Secretary of the Navy, who immediately directed a continuance of the search by both vessels.

In obedience to these orders the *Juniata* left St. John's on the morning of the 18th, the intention being to proceed up the Labrador Coast and then to

visit other places as might seem expedient. As night came on the prospects of the voyage were gloomy and discouraging. Ice was forming, the weather was bad, the sea heavy, and the whereabouts of the Tigress unknown.

The night was very dark, and at eleven o'clock a light was reported on the port beam. Rockets too were observed from a far-off steamer. Commander Braine ordered the Juniata to be slowed down, and answered the signals. There was the greatest excitement on board. A steamer in this sea at this time was a rare thing, and it was felt that news from the Polaris was at hand. The steamer, supposed to be the Tigress, approached, and at midnight was close aboard; soon a shout came over the water:—

“Ship ahoy!”

“Ay, ay,” was answered from the Juniata.

“Is that the Juniata?”

“Yes.”

“We have the American Consul aboard.”

A boat was immediately lowered from the Juniata, which conveyed Consul Molloy of St. John's to that steamer. He informed her commander that he had received a telegram that the Polaris crew had arrived at Dundee, Scotland, in a whaling vessel; and that, on receipt of the dispatch, he had chartered a steamer to follow the Juniata and attempt to overtake her. The news was received with great delight, and both vessels returned to St. John's; at which port the Tigress also arrived on the 16th of October, after an uneventful cruise in the track of the Northern whalers.

CHAPTER XLIX.

THE WRECK OF THE POLARIS.

HAVING given an account of the organization, outward voyage, and discoveries of the Polaris Expedition, the death of its commander, the wintering at Thank God Harbor, the disastrous division of its members, the perilous drift on the floes of a portion of them, and the search made for the missing steamer, it remains to follow the fortunes of the Polaris from the 15th of October, 1872, when, with fourteen men on board of her, she parted her hawsers and was swept away amid the storm and darkness; and the story of the experiences of Capt. Buddington and his party, may perhaps be best told in his own words:—

“At five P. M. on the 12th of August, we started from Polaris Bay for the United States. We drifted through the ice till the 29th, when we were locked fast in the ice-pack and drifted with it. We were still leaking fast, but the donkey engine enabled us to keep the water under. I rigged out a house on the floe, calculated to hold all our hands—thirty-three in number. It was twenty-seven by twenty-four feet and was covered with canvas. On the 9th of October I had bags of bread placed in it. We were still drifting south, our position being $78^{\circ} 45'$ North, $72^{\circ} 15'$ West.

“On the 15th, the wind blew with a velocity of forty miles, accompanied by a violent snow-storm. I had another hawser passed out to the old massive floe which had brought us down from lat. 80°, and which was our only safety. At 7.30 we had a severe nip, from a heavy old floe which passed heavily on our starboard side, raising the vessel a few feet and keeling her over to port. It was then reported to me that we were making water fast and were stove aft. Our engines could no longer cope with the water.

“The two native Esquimaux had their wives, children and effects on the floe, it seeming to them, as it did indeed to all of us, the safest place. Our remaining two whale boats—all we had—were lowered on the ice and hauled back to a secure place alongside of the stores. Sufficient provisions and fuel to last all winter were put on the ice, together with musk-ox skins, bedding, and all the clothing except what we wore. At half-past nine the floe suddenly broke; that part to which the vessel was made fast breaking away from the main body. The bow hawser snapped like pack-thread, the anchors slipped, and the violence of the wind sent the vessel adrift as rapidly as if she had been under steam. At a moment's notice we were thus separated from more than half the ship's company.

“We were now in a critical condition, without boats, anchors, or hawsers; but there was no time for reflection, as the water was gaining fast, and would soon reach the furnace fires in spite of the bilge pump which was all this time at work, assisted by the alley-way pump; and if we could not start the deck pumps it was evident that the vessel would go down.

The ice around us was fine broken "brash," which would not bear the weight of a man. By this time the water in the boiler was hot, and, by pouring several bucketfuls down the pumps, we thawed them sufficiently so as to enable us to keep the water from gaining; and never did men use their strength with more energy than we did on that occasion. It was evident we could not last long at the work, but fortunately, just then, the engineers reported steam up, by which additional aid we were enabled to keep the ship afloat.

"On the morning of the 16th we found our position a few miles north of Littleton Island, in Smith's Straits. The gale had then subsided, and it was shortly afterwards quite calm. We looked from the masthead of our vessel for our companions on the floe, but could not see anything of them whatever. The current must have taken them in a different direction from the course the wind took us. About noon a breeze sprung up from the north, and, opening a lead in-shore to the east, the vessel at this time began drifting out of the straits again. By the aid of steam and sail I took advantage of the lead when opened wide enough to admit me, and ran the vessel as near shore as the ice would allow, and made fast with lines to heavy grounded hummocks. Here we were aground at low water, there being nine feet rise of tide at this place, which happened to be Kane's Lifeboat Cove, lat. $78^{\circ} 23\frac{1}{2}'$ N., long. $73^{\circ} 21'$ W. We kept an anxious lookout all the time from the masthead of our vessel for signs of the party; but the sharpest eyes on shipboard failed to see aught of them. As, however, they had the boats, even to the little scow, we were in hopes they would possibly be able yet to make for us.

“On the 17th I surveyed the ship, and found the stem entirely broken off below the six-foot mark. I called the officer’s attention to it, who only wondered she had kept afloat so long. I therefore considered the *Polaris* a lost vessel, and immediately made preparations for leaving her and living on shore during the winter, getting our spare sails, coals and provisions on shore. We were assisted in this by the Etah Esquimaux, who came to us the day after we got ashore. When these Esquimaux hove in sight, gesticulating and hollooming with great apparent glee, we took them to be our castaways, and immediately cheered most heartily in return. We put up a house on shore, which was superintended by Mr. Chester, those not engaged in building it being occupied getting provisions and fuel, which they did with a great deal of difficulty, as they had to leap from one detached piece of ice to another all the way to the shore. Often some of the party would tumble through fissures and get wet, which was a great inconvenience, considering the insufficient supply our wardrobe furnished for change.

“On the morning of the 21st we had a number of Esquimaux visitors. They came in five sledges, and kindly went to work to assist us, proving of excellent service. In a short time we had all the portable articles from the ship on shore. I made them such presents as our scanty stock would permit, and they expressed themselves well pleased. It was fortunate that, among other articles put on the floe, were a number of those indispensable articles to an Esquimaux—a quantity of knives. On the 24th they left us for Etah, we having completed our work for abandoning the vessel. At six P. M. we stopped the

steam pumps to let her fill, and bid farewell to the little *Polaris* which had penetrated through dangers and hard knocks to a high latitude, but which was destined not to return with the honors she had gained. During the remainder of the month we were visited by natives—men, women, and children.

“I sent a party to McGary’s Rock in search of Dr. Hayes’ boat and provisions, but could discover no sign of her. I was afterwards informed by the natives, that a party from the West Land found her five years ago and appropriated to their own use what was serviceable to them; the boat they discovered to be worthless and full of holes. At high water the lower decks of the *Polaris* were covered, the water rising to within three feet of the upper deck, the vessel being firm on the rocks. I was in hopes she would remain in that position, as we had to get fuel from her, and material for making our boats for our summer journey south.

“We spent the winter months of November, December and January in household duties—getting ice for melting purposes, supplying galley and house stoves with coal, and keeping passage ways to and from the house free from snow. A great many foxes were shot. We were visited continually by the natives, who were suffering a great deal from cold and hunger. Several of the families made their residence with us for the most of the winter, building snow-huts for themselves, where they slept. We supplied them with a share of the provisions we had, but still they had to kill a great many of their dogs in order to give their children fresh meat. Two families in particular reduced their team of dogs to one, and another family to two.

“Some of our people had slight attacks of scurvy, principally in the gums, but in general the health of our party remained good. The month of February brought us daylight. On the 15th, the sun was seen for the first time since its disappearance on the 16th of November. We had now to consume the bowsprit, masts and rigging for fuel, these fortunately having been landed. The only material for building boats was the ceiling of the alley-ways and after-cabin—the house on deck being used as fuel. The following months were occupied in building boats for our journey.

“Shooting parties went out occasionally, but, with the exception of a few hares, generally returned unsuccessful. There was one deer killed during the season, but a great many were seen. Although the natives had left us some time for their respective settlements and hunting grounds, they still, however, continued to visit us; and, as if to remind us of our former kindness to them, which they appeared to have appreciated, kept bringing to us quantities of walrus liver, which made a great improvement in the health of our party.

“I had suitable bags made out of the foresail, and filled them with provisions for our journey. I also built a small boat out of some square lumber for the Etah natives, which will be a great acquisition to them in sealing and getting eggs from the islands. By the 28th of May all our preparations were made. I must compliment Mr. Chester, who superintended the building of these boats. They are creditable scows—far better structures than I thought could have been made out of the material we had. They are flat-bottomed, and carry considerable weight. The

open water was by this time close up to our house. Our provisions and what limited clothing we were to take with us, were brought down to the water's edge to be in readiness for embarkation. There still remained with us two native families, and during the winter and spring we were visited by nearly all the natives from Etah to Cape York. There were during this time three deaths and one birth among the natives. One of the former was Myouk, (mentioned by Dr. Kane,) who was one of the first to visit us after our vessel got on shore.

"I had intended starting on the 1st of June, but that day being Sunday I postponed our departure until the following day. It was then blowing a gale of wind and we could not start with safety. In the meantime we deposited several boxes containing books, scientific instruments, three-box chronometers and the pendulum, on the north side of Lifeboat Cove, and covered them with rocks. At 1 A. M., on June 3d, I called all hands, got a hasty breakfast, and left our house for the last time, dividing our party into two equal parts. We then launched our boats, two in number, placed our provisions and clothing in them, and left Polaris Point and the scenes of our long winter stay, for Melville Bay and Upernavik.

"Having made a halt at the settlement of Etah, which we found deserted, we reached Hakluyt Island late on the evening of the 4th, meeting with but little obstruction from ice. A gale of wind and pack ice prevented us leaving until the 8th. We then landed on Northumberland Island. The ice impeded our further progress. At eight P. M. on the 10th, having previously made three unsuccessful attempts to get forward, we entered a lead that

extended across the whole sound toward Cape Parry, our intended route. We were met by a heavy body of pack ice which completely closed us in, and were compelled hastily to haul our loaded boats on the ice to keep them from being crushed.

“ We drifted with the pack all that night, and the morning of the 11th found us abreast of our former encampment. We were then about four miles from the shore. There was a small lead of water along the land. We had to go to it or go adrift in the pack. We commenced at once to transport our provisions and boats over the pieces of floe. After a great deal of exertion and labor, we finally succeeded in getting a landing, at 2.30, on the morning of the 11th, in the same place we left the evening before. On the 12th there was a good opening in the ice. We started at 10.30, and with a good breeze we reached the mainland. We pulled round Cape Parry, and halted on Blackwood Point south of Cape Parry and near Fitzclarence Rock. On the evening of the next day we landed at Dalrymple Island. From this point we met with various obstructions from ice and bad weather. We finally succeeded in getting past Wolstenholm Sound and Cape York. We afterwards entered Melville Bay, meeting with various obstructions from ice, and in some places we had to haul our boats and effects over from the one lead to the other.

“ We were thus proceeding on our journey south until the morning of June 23d, when we saw a steamship beset about ten miles south. We were then about twenty-five miles south-east of Cape York, and hauled up on the ice. The passage was completely blocked with ice. A few hours previous to this my

boat got stove, having been caught between the floe and land ice; but we had it repaired with canvas and tacks brought for the purpose. At this time our fuel was very scarce, not having more than would last a week. For some time we had but one hot meal in twenty-four hours, reserving our fuel for melting snow for drinking water, as we were unable to procure any off the floe.

"I sent two of our party to the vessel to let them know of our situation. Before reaching the vessel, however, they were met by a party of eighteen men from the ship—these latter having recognized a party on the floe—who had come to render what assistance was in their power to what they supposed was the crew of a shipwrecked whaleship. With the exception of two of the party, who went back to their vessel with an account of us, the rest came back to the boats with the men whom I had sent. I made immediate preparations to get on board the steamer, the men from this vessel kindly assisting us with our personal effects. We started at seven P. M., leaving our boats, provisions, etc., behind, and arrived at twelve meridian on board the whaling ship *Ravenscraig*, Kirkcaldy, Scotland, William Allen, master, bound for the West Coast on a whaling voyage.

"I cannot express myself in terms sufficiently adequate of the kind reception we got from Captain Allen, who immediately opened his own wardrobe for our benefit. The surgeon of the ship, Mr. A. D. Soutter, was most assiduous in his efforts to promote our comfort—indeed, all the officers and crew vied with each other in their efforts to make us comfortable.

"We had at the time we were rescued only just

commenced the difficult part of our journey, and had yet to make some three hundred miles of hard travel before we could get to a place of comparative safety. Captain Allen expressed his gratification in falling in with us, as he and his officers expressed their undoubted conviction that it would have been utterly impossible for us to reach the settlements in our boats, especially if we had in store for us anything like the ice which the Ravenscraig encountered the previous three weeks. It was very evident that our boats would not have stood hauling over the ice, and to have abandoned them and attempted to make the journey on foot was simply not to be entertained a single moment. It was, therefore, lucky that the Ravenscraig fell in with us. As I may say with safety, it was the saving of our lives. We were surprised and greatly rejoiced to hear of the safety of our fellow-explorers who had got adrift from us."

Captain Allen, whose ship was fast in the ice at the time, describes the incidents of the rescue as follows:—

"At one o'clock A. M., on the morning of the 23d of June, the lookout from the crow's nest reported that a party, supposed to be Esquimaux, were making their way over the pack ice towards the vessel. At this time they were a long way distant, probably thirteen or fourteen miles, and appeared to move very slowly. By nine A. M. the strangers had advanced a mile or two nearer, and came to a halt. We could then just make out that they were not Esquimaux, and could distinguish two boats, each of which displayed a small flag on a pole. Owing to the distance and refraction it was almost impossible to make this out with certainty. Concluding they had seen us, our

ensign was at once hoisted as a reply signal, and we sent off eighteen picked men to render any assistance required, while the strangers were observed to detach two of their number in the direction of the vessel. When these met our party, the whole proceeded onward to the boats, and a messenger was sent back to inform us of the news.

“At six P. M. the entire party started for the vessel, and some idea of the difficulty of traveling over such ice may be formed from the fact that it was twelve, midnight, before they got on board, taking nearly seven hours to perform twelve miles distance. This arose from the soft and slushy state of the deep snow covering the ice, while myriads of huge hummocks were piled everywhere over the surface, which was also split up and full of treacherous holes, into which many a flounder took place. The party on reaching the ship was made heartily welcome, and as comfortable as the means at our command could supply. They appeared tired and weatherbeaten, but in good spirits and thankful at having fallen in with a ‘Scotch whaler,’ for which vessels they were on the lookout, knowing as the commander did, that the whalers about this time passed through Melville Bay.”

After reaching the North Water, Captain Buddington and ten of his companions were transferred to the whaling steamer Arctic, and arrived at Dundee on the 18th of September. Proceeding to Liverpool, they were tendered a free passage home by several steamship lines, and took passage in the City of Antwerp, which reached New York on the 4th of October. The other three men were taken to Dundee in the Intrepid, and arrived home a little later.

CHAPTER L

GERMAN ARCTIC EXPEDITIONS.

DR. AUGUSTUS PETERMANN, having unsuccessfully incited his German countrymen to join the noble band of Arctic explorers, at his own risk fitted out a tiny vessel called the "Germania," which sailed from Bergen, May 24th, 1868, under the command of Karl Koldewey, a native of Hoya, in Hanover. The whole crew numbered only eleven men. Being unable to approach the east coast of Greenland, Capt. Koldewey made for the Spitzbergen seas, and attained a latitude of $81^{\circ} 5'$. He then sailed down Hinlopen Strait in August, sighting the "Swedish Foreland," and returned to Bergen September 30th, 1868.

This first German expedition was not a success—neither was it a failure; and Dr. Petermann and his friends were not discouraged. It awakened an interest in Polar exploration which resulted in a second expedition of two vessels—a screw steamer re-named the Germania and manned by a crew of seventeen, and the brig Hansa, with a crew of fourteen, under the command of Capt. Hegemann. The whole expedition was put under the command of Koldewey, who took as his flag-ship the "Germania;" and, in addition, there were attached to both ships several eminent men of science, provided with every requisite

necessary for the successful performance of their duties. King William came down and bade them good-bye; a distinguished party gave them a farewell dinner, and out of the good harbor of Bremen they sailed *more Teutonico* to the strains of a brass band, on the 15th of June, 1869.

In latitude $70^{\circ} 46'$, longitude $10^{\circ} 51'$, the "Hansa," which had on board some of the supplies of fuel for herself and consort, got separated from the "Germania," and was caught in the ice; and on the 22d of October the ice-floes, pressing on every side, crushed her. Then, homeless in the midst of this dreary ice-field, with the winter coming on, the crew built on the floe, with the patent fuel, a house in which they took refuge. In this strangest of all abodes they passed Christmas—not uncheerfully on the whole. In two months the current had carried them south four hundred miles, and though they were only thirty miles from land, it was impossible to reach it. On the 27th of November, their track-map shows that they were just about half-way between Greenland and Iceland. Shortly after their Christmas festivities, the floe-split and ruined their house. For some time it would seem as if their lives hung on a thread. But they were destined for better things. The floe righted again, and they left their boats, to which they had been forced to flee, and again built their fuel house. On the 3d of January 1870, they were close to the Greenland coast, but could only survey it in sadness, as the broken ice precluded the possibility of ever reaching it.

As spring advanced their situation was more cheering in one sense, but more depressing in another. Their ice island had now, by the lashing of the surge

and the melting of the ice, got reduced until it was not more than a hundred yards in breadth. By May their sextants told them that they had drifted eleven hundred miles on their cheerless raft. Finally, on the 14th of June, they arrived in safety in their three boats at the Greenland Moravian Mission station of Friedriksthal, in latitude 60° , just on the other side of Cape Farewell. Here they met their countrymen of the Herrnhuttian *Unitas Fratrum*, and once more were safe, after perils very similar to those experienced by the Polaris ice-floe party. Notwithstanding all their hardships none of the crew died, though one of them became temporarily insane.

Fairer fortune attended the steam-aided "Germania." She succeeded in sailing up the East Greenland coast to as high as $75^{\circ} 30'$, but in August was forced to turn again to the southward, and winter among the Pendulum Islands, in latitude $74^{\circ} 39'$. From this central point many excursions were made, and though at times the thermometer sank as low as 40° below zero (of Fahrenheit), yet musk oxen—strange enough—being abundant, they passed a not unpleasant winter—as winters in 74° of north latitude go. Christmas was absolutely warm (*only* 25° below zero), and with open doors they danced and feasted as it had been their custom to do in festive, Christmas-loving Germany. "By starlight," says Captain Koldewey, "we danced upon the ice; of the evergreen *Andromeda* (*Cassiope tetragona*) we made a Christmas tree; the cabin was decorated with flags, and the presents which loving hands had prepared were laid out upon the tables; every one received his share, and universal mirth prevailed."

After this holiday time, the explorers began to

think of business. The sledge equipments were got ready, and after one false start, a party of seven set out, March 24th, under the command of Captain Kolde-
wey and Lieutenant Payer—one of the scientific corps of the expedition. Dragging the provision-laden sledge behind them, they set their faces to the north, and after reaching a distance of one hundred and fifty miles from the ship, want of provisions compelled them to return. On the 27th of April, laden with zoological, geological, and botanical collections, but decidedly sceptical regarding the “open Polar sea,” they regained the deck of the “Germania.” A grim cape—which has been appropriately named after Prince Bismarck—marks the northern limit of their discoveries.

As soon as navigation was again opened they commenced their explorations, and were fortunate enough to discover (in about latitude $73^{\circ} 15'$) a branching fiord, stretching for a long distance. This they explored between longitudes 22° and 28° , without reaching its termination, the leaking boiler of the engine compelling them to return. This fiord was named Franz Josef, in honor of Payer's sovereign. Along its shores are peaks (Petermann's and Payer's), respectively fourteen thousand and seven thousand feet high. On the 11th of September 1870, the Germania returned to Bremen. Though the expedition failed in some of its objects it did admirable work for geography and science, which redounds to the credit of the German people who supported and the eminent men who planned and carried it out.

The Austro-Hungarian Arctic Expedition was undertaken in 1872, and the idea was received with enthusiasm by the whole Austrian empire. The

COUNT W LCZEC IN NOVA ZE'BLA

command was entrusted to Lieutenants Payer and Weyprecht, both of whom were members of the German expedition under Koldewey; they had also, in 1871, made an experimental trip to the seas east of Spitzbergen. They now hoped to round the northeast coast of Nova Zembla, winter at the most northern point of Siberia, and then continue the voyage eastward to Bering's Strait. Captain Carlsen, the finder of the Barentz relics, joined the expedition as pilot.

The steamer 'Tegethoff' was fitted out in the Elbe, with every modern appliance, and left Tronso harbor on the 13th of July, 1872. Though only twenty-three persons constituted the ship's company, yet Germans, Italians, Slavs, Magyars, and Norsemen were among them—Italian being the official language used. The natives of southern Europe departed from the mouth of the Weser with characteristic lightheartedness, and their merry Italian airs wiled away the hours.

Count Wilczek in the yacht "Isbjorn" (Ice Bear) accompanied the Tegethoff as far as the Nova Zembla coast, near which the two vessels anchored August 12th. Several excursions were made to adjoining islands by sledge parties, who secured geological and botanical specimens, and spoils of the chase. On the 23d the north wind set in with great force, the new ice began to form, and the vessels parted—the Isbjorn starting for home, and the Tegethoff steaming away northward.

Later, in the autumn of 1872, the explorers reached a region of intense cold; their ship was surrounded by immense fields of floating ice, firmly frozen in, and thus imprisoned by immovable fetters, drifted slowly—they knew not whither—until at length, on the

30th of August, 1873, in latitude $79^{\circ} 43'$, longitude $59^{\circ} 33'$ E., they beheld, to their extreme delight a bold rocky and hitherto unknown coast looming in the distance. This newly discovered country they named "Francis Joseph Land."

Although the mountains and glaciers of the new land could at this time be clearly discerned from the edge of the floe with which the fettered ship was still drifting, it was not till the following March that sledge parties were able to reach and explore it; and by the beginning of May, 450 miles of new sea, land, and island archipelago had been carefully noted.

On the 20th of May, 1874, the explorers deserted the steamer, and started homeward drawing sledges upon which were boats; but so rough were the hummocks that after two months of great exertion they had only got a few miles from the ship. Fortunately, however, leads now opened in the ice, and they launched their boats and succeeded in reaching the open water at $77^{\circ} 40'$ N. latitude, where they were picked up by a Russian fishing-smack and conveyed to Vardo, Norway, where they arrived September 3rd, 1874.

For courage, energy and noble endurance as well as for successful exploration, the members of this expedition will be long remembered. No trace of scurvy appeared, and only one death occurred during their absence of over two years. Bears' meat was much of the time the only food attainable, and it was so bad that the hardy Adriatic mariners declared it 'only fit for the devil on a fast day;' yet they were never insubordinate and never despaired, but in the very depth of winter they remembered the Arabic proverb, 'This too will pass away.'

RELICS OF THE DUTCH EXPEDITION.

BARENTZ'S HOUSE AT ICE-HAVEN.

CHAPTER LI.

SWEDISH AND NORWEGIAN EXPEDITIONS.

THE story of the Dutch expedition which wintered at Nova Zembla in 1596 has been related in Chapter IV. This voyage of Barentz, though the first, remained the only one which had rounded that north-east point of Nova Zembla; and the house of Barentz was unvisited for two hundred and seventy-eight years. But the spell was broken in 1871. Elling Carlsen, a Norwegian captain, who had been engaged in the North Sea trade for eighteen years, sailed from Hammerfest on the 16th of May, in a sloop of sixty tons, called the "Solid." He reached the Ice Haven of Barentz September 7th, and on the 9th saw a house standing at the head of the bay. The materials had evidently belonged to a ship, and among them were several oak beams. Round the house were standing several large puncheons, and there were also heaps of reindeer, seal, bear, and walrus bones. The interior is described by Captain Carlsen exactly as represented in the curious old drawing by Gerrit de Veer, the historian of the Dutch Expedition.

The house in which Barentz and his gallant crew had wintered, can never have been entered by human foot during nearly three centuries that have since elapsed. The row of standing bed-places along one

side of the room, the halberd, and the muskets, were still in their old places. There stood the cooking-pans over the fire-place, the old clock against the wall, the arms and tools, the drinking vessels, the instruments, and the books that had beguiled the weary hours of that long night, two hundred and seventy-eight years ago. The "History of China" points to the goal which Barentz sought, while the "Manual of Navigation" indicates the knowledge which guided his efforts. Stranger evidence never told a more deeply interesting story.

On the 4th of November, 1871, Captain Carlsen completed his adventurous voyage by anchoring once more at Hammerfest. The Dutch Government have secured the numerous relics which he brought away, for preservation in the native land of the great navigator, whose countrymen feel an affectionate pride in the glorious deeds of their "Sea fathers," and will cherish these memorials of a very noble achievement with careful reverence. Many of them, like the old clock-dial, are very valuable in an antiquarian point of view; but not the least interesting are the flute, which will still give out a few notes, and the small shoes of the poor little ship's boy who died during the winter.

For several years past, Sweden and Norway have, with a skill and resolution which do the highest honor to the gallant Scandinavian nation, prosecuted scientific investigations within the Arctic Circle. The most important of their expeditions, equipped under the superintendence of Professor Nordenskiöld, sailed from Tromsø, July 21st, 1872. It was composed of the steamer "Polhelm," the brig "Gladan," and the steamer "Onkel Adam." The "Polhelm"

was commanded by Lieut. Palander, of the Swedish Royal Navy, and manned by officers and men of the same service. The other two vessels accompanied her as transports and were to have returned to Sweden before the winter set in.

The expedition was supplied with a dwelling-house, for winter-quarters, of six rooms, including kitchen, larder, bathing-room, and potato cellar, and three large sheds attached to the house, adapted for observatories. For the sledge parties were provided pemmican, concentrated rum, cooking apparatus, warm sleeping bags, sail-cloth tents, and photogene oil for fuel. Three light ice-boats, and two larger boats, formed the boat equipment, and all were provided with ash-wood sledges. Fifty reindeer were also shipped, most of them from Kola, in Lapland, with experienced Laplanders, to drive and attend them.

The three vessels reached Mussel Bay, Spitzbergen, in lat. $79^{\circ} 50'$ north, on the 3d of September 1872; three days later they were inextricably shut in by the ice, and the number of men to be fed through the winter was thus suddenly increased from twenty-one to sixty-seven. Some of the reindeer, too, managed to escape through the carelessness of the Laplanders. In spite of these discouragements, however, preparations for wintering progressed briskly, and the portable house was being rapidly erected and furnished.

On the 1st of October, the startling news arrived that, at a neighboring promontory called Grey Point, six Norwegian fishing vessels, with an aggregate of fifty-eight men, were frozen in, and that, as their provisions would not last beyond the end of the year, they were sorely in need of help from the Swedes. Nordenskiöld and his colleagues sent back word to

them, that they themselves had been obliged to provide for a much larger consumption of victuals than they had bargained for, but that they were willing, after the 1st of December, to share their food with them if the Norwegians would undertake to conform strictly to the arrangements made by the leaders of the expedition. They were further informed that at Ice Fiord, on the west coast, a house had been erected at a time when it was in contemplation to establish a colony for the purpose of working the phosphate beds there. This house was warm and comfortable, and well-supplied with stoves, and with a stock of provisions. Eighteen of the Norwegians accordingly determined to repair thither, while the remaining forty stayed by their ships.

On the 22d of October, Palander and five men started with sledges to visit the imprisoned fishermen, and reached Grey Point on the 24th. The eighteen men had started for Ice Fiord about two weeks before. After having done what he could in the way of advice to those left behind, Palander set out to return on the 26th; but though the distance between the two places is only ten miles as the crow flies, it took no less than five days to get back to the ships.

On the 4th of November a storm arose, which dispersed the ice and released two of the imprisoned fishing vessels, and thirty-eight of the Norwegians managed to reach home after a long and perilous voyage, and after vainly attempting to rescue their countrymen in Ice Fiord. Two men, an old ice-master named Mattilas and his cook, remained at Grey Point by the ice-bound vessels, being unwilling to abandon them. They appear to have endeavored subsequently to reach Mussel Bay, as their corpses were found in an open boat.

The fate of the eighteen men left in Ice Fiord was ascertained by Captain Mack, who discovered the dead bodies of these unfortunate fishermen, together with a diary kept regularly from the 7th of October, 1872, to the 3d of March, 1873, and with less regularity until the 19th of April.

Toward the close of April, Nordenskiöld and Palander with fourteen men started north, the intention being to get as near the Pole as possible. They made their way to Parry Islands, crossing from the North Cape on the ice. Here they found the ice so strong to the northward that the idea of a long journey in that direction was out of the question. They returned to Mussel Bay on the 29th of June, after an absence of sixty days, during which they encountered very severe weather. Subsequently they again endeavored to travel northward by sledges from Phipps Island, but were prevented by lack of provisions.

Early in June the monotony of Mussel Bay was enlivened by the arrival of the Steamship *Diana*, just from England, having on board Leigh Smith's exploring party. On the 30th of June, the ice broke up and the *Gladan* immediately started for home, whither the *Polhelm* soon followed her, arriving at Tromsø on the 6th of August, 1873. Although the expedition was forced to return without having accomplished one of its main objects—the reaching of a very high latitude by means of sledges,—still, the harvest of results obtained by dredging, by magnetic, meteorological, botanical, and geological observations is extremely rich. These throw great light on the amount and nature of organic life within the Polar Circle, as well as on the great physical changes which those regions have undergone in past times.

In 1875, Nordenskiöld projected an expedition to the Kara Sea and Siberian rivers, and carried out his programme successfully. With four scientific companions he started from Tromsø, at midsummer, in the *Proeven*, a small Norwegian sloop manned by twelve walrus-hunters, and made his way without difficulty to the mouth of the Yenisei—"thus inaugurating," he hoped, "a new and important route for the commerce of the world."

At Dickson Harbor, as the anchoring place was named, Nordenskiöld and two of his companions, with three sailors, left the vessel and started, Aug. 19th, to ascend the river in a Norland boat, the *Anna*, which had been brought for the purpose. The boat was sunk almost to the gunwale by its load, and was not in a condition to stand a heavy swell.

"With favorable wind and smooth water," says Nordenskiöld, "we sailed on without any long rests in 42 hours to Cape Schaitanskoi, where we arrived on the night before the 21st, wet through, and worn out by want of sleep. On the way we landed at Krestovskoj, a now deserted *simovi*, which, to judge by the number of the houses and the style in which they were fitted up must at one time have had its prosperous period. Three houses with flat turf-covered roofs still remained, each by itself forming a veritable labyrinth of rooms—living-rooms, bake-rooms, bath-rooms, store-room for blubber, &c., all in one. All household articles were taken away, and literally there was not to be found a nail in the wall—a sign that the inhabitants had not died out, but removed."

On the last day of August the travelers overtook a steamer which they had been eagerly pursuing for the two previous days, and were received on board by its master, Ivan Michailovitsch Jarmenieff.

"The steamer *Alexander* was neither a passenger nor a cargo boat, but formed a movable warehouse propelled by steam, the

master of which was not a seaman, but a friendly merchant, who clearly did not take much concern with navigation, but more occupied himself with goods and trade, and was also seldom styled by the crew captain (*Kapitan*), but generally master (*hosain*). The equipment of the vessel itself, corresponded to this state of things. The whole fore-cabin was fitted up as a store, with shelves for the goods along the walls, a common desk, &c., &c. The after-saloon was employed as a counting-house, writing and bedroom for the master, and was besides also over-filled with various kinds of goods, spirit casks &c. There was thus no place for passengers, and at the first instant, after we lay alongside the steamer, with the Swedish flag hoisted, the 'master's' reception of us was by no means specially friendly. At the beginning he was even not disposed to take us along. But I had scarcely succeeded in explaining to him, by the aid of our pilot, Feodor, and a Swedish-Russian dictionary, what sort of people we were, and what journey we had made, before all was completely altered, and from that moment we had in our 'master' the most agreeable and accomodating host we could desire.

"The nautical command on board was in the hands of two mates of stately and original appearance, clad in long caftans; who each during his watch sat on a chair at the wheel, generally smoking a cigar, and, with the most careless appearance in the world, exchanging jokes with people descending the stream. A man stood continually in the fore trying the depth with a long pole; for in order to avoid the strong current of the deep main stream, the course was never taken on the deepest part of the river, but as near the banks as possible—often so near that it was almost possible to jump ashore.

"We were yet far to the north of the Arctic circle, and as many perhaps imagine that the little known region we were now traveling through, the Siberian *tundra*, is a desert wilderness covered either by ice and snow, or by an exceedingly scant moss vegetation, it perhaps may not be unsuitable to state that this is by no means the case. Already had the fertility of the soil and the immeasurable extent and richness in grass of the pastures drawn forth from one of our walrus-hunters, a middle-aged man who is owner of a little patch of ground among the fells in northern

Norway, a cry of envy at the splendid land our Lord had given the 'Russian,' and of astonishment that no creature pastured, no scythe mowed, the grass.

"As in the *simovies* situated further to the north, the houses in all the villages on the Yenisei are built of logs, pretty close together, with the richly-carved gable to the street or lane. Except for the cockroaches that crawled around everywhere, the interiors of the houses were very clean, and the walls were adorned with numerous, if not very artistic, photographs and engravings, for the most part of the Imperial family, remarkable Russian notabilities, often in generals' uniform, scenes from Russian history, &c. Richly decorated sacred pictures were always found placed in a corner, and before these there hung some small oil-lamps or little wax-lights, which were lighted on festivals. Sometimes the floor, at least in the principal room was covered with furs. The bedstead was generally formed of a couch near the roof, so large that it occupied a third part or a half of the room, and so high from the floor that a man could go upright under it. Food was cooked in large ovens which were fired for that purpose daily, and at the same time warmed the houses. Fresh bread was to be had every day, and even for the household of the poor a large brass tea-urn was a necessary household article. One was certain to meet with a hearty and friendly reception wherever he stepped over the threshold, and if he stayed a short time he generally had to drink a glass of tea with his host, whatever time of day it might happen to be."

After journeying on the *Alexander* about 1000 English miles, our travelers disembarked at the town of Yenisseisk, on the last day of September, and returned home overland by Moscow, Petersburg, Helsingfors, and Abo.

For this voyage from Norway to the mouth of the Yenisei, whereby a sea route to Siberia was inaugurated, Nordenskiöld received in January, 1876, the thanks of the Russian government. In the same year he made another successful voyage to the mouth of the Yenisei, and back.

CHAPTER LII.

THE ENGLISH EXPEDITION OF 1875—76.

THE success of the Polaris Expedition in wintering in a higher latitude than ship had ever reached before, created much interest among European geographers, and in England, which had sent out no Arctic expedition since the search for Franklin was ended, a national expedition on a grand scale was proposed. Lady Franklin favored such an enterprise, and hoped "for the credit and honor of England that the discovery of the North Pole would not be left to any other nation."

"The navy," wrote an English admiral, "needs some action to wake it up from the sloth of routine and save it from the canker of prolonged peace. It cries not for mere war to gratify its desire for honorable employment or fame. There are other achievements as glorious as a victorious battle; and a wise ruler and a wise people will be careful to satisfy a craving which is the life-blood of a profession. The rude wooden monument to the intrepid American, standing alone in the Polar solitude, is at the same time a grand memorial, a trophy, and a challenge."

Finally, in 1874, after the return of Payer and Weyprecht, the English government decided to send out an expedition the ensuing year, to attempt to reach

the North Pole by the route up Kennedy Channel whose waters had thus far been navigated only by American vessels. Two steamships, named "Alert" and "Discovery," were selected and fitted up for the perils to be encountered. Provisions for three years, and everything that could be suggested in the way of clothing, medicines and traveling-gear were laid in; and it is probable that no previous explorers had been equipped in so methodical and liberal a manner.

Captain George Nares, a distinguished officer then commanding the Challenger which was circumnavigating the world for scientific purposes, was ordered home from Hong-Kong to lead the expedition. Captain H. F. Stephenson, the second in command, was assigned to the Discovery. The two ships were manned and officered with complements, all told, of 121 souls. The popularity of the undertaking was so great that of lieutenants alone, more than enough volunteered to have manned both vessels.

The Alert and Discovery started from Portsmouth, May 29th, 1875, and were accompanied as far as Disco Island by a third vessel carrying coal and stores. Christian Peterson and Hans—Dr. Kane's fellow travelers—joined the expedition at Disco as interpreter and hunter, and sixty dogs were bought. At Upernavick, July 22nd, the explorers bade farewell to civilization and steamed north across Melville Bay into Smith Strait. Captain Buddington's winter camp was visited, and some boxes of books, instruments, etc. were found.

On the 19th of August the two ships were passing up Kennedy Channel, and soon afterward they were forced by the pack-ice into Lady Franklin Sound—

an inlet on the west coast, opposite Thank God Harbor. At the entrance to this inlet, in latitude $81^{\circ} 44'$ north, longitude $64^{\circ} 45'$ west, the Discovery was anchored in a sheltered position, where she remained frozen in for nearly eleven dreary months.

Leaving Captain Stephenson in his snug winter quarters, Captain Nares, in the Alert, steamed out of Discovery Harbor, August 26th, and proceeded slowly up Robeson Channel, meeting with much heavy ice. At noon, September 1st, the ship was in latitude $82^{\circ} 24'$; it was a higher latitude than had before been attained by any vessel, and the ensign was hoisted at the peak in honor of the event. The Alert had now left Robeson Channel and fairly entered the circum-polar sea. Further progress northward was however impossible; barely escaping the southern drift, the ship was brought inside a floe-berg near the northeastern coast of Grinnell Land, and was soon frozen in. Floeberg Beach, as the winter harbor of the Alert was called, was in latitude $82^{\circ} 24'$ north, longitude 61° west. The two ships were about sixty miles apart.

Preparations for the winter were now begun. Stores were safely housed on shore for use in case of fire or other disaster on shipboard. The sides of the ships were banked with snow and the decks were covered with it. Sledging parties were sent out to explore the surrounding regions, make deposits of provisions for the use of the spring expeditions, and to secure game. One of these parties was absent nineteen days.

On the 16th of October the sun disappeared, and the long Arctic night brooded over the explorers.

Sledging parties had now to be abandoned, but the usual ship discipline was kept up. The officers engaged in scientific investigations, and the men spent a portion of each day in the open air. The crew of the *Discovery* constructed a skating ground, a walk a mile in length; and a theatre sixty feet long, with walls of ice and snow and a roof of sail cloth, where comedies were performed regularly. Actors were plenty, but there was a dearth of actresses. The crew of the *Alert* built a mound of snow seventy feet high, and it was a favorite exercise to run down the slope. Schools conducted by the officers were held evenings. Guy Fawkes was burned on both vessels, Nov. 5th, amid great applause; and Christmas was appropriately celebrated. Thus the winter passed pleasantly away, and perhaps there were not in the English navy healthier or happier crews than those of the *Alert* and *Discovery*. Hans, however, was evidently homesick. In January he became despondent, his actions were strange, and one day he was missing. A search was instituted, and he was tracked by the aid of lanterns to a neighboring island, and found ensconced in a hole in the snow. He was persuaded to return to the ship, and recovered his spirits as spring came on.

The first of March brought back the sun—the signal for renewed activity. There had been no communication between the vessels since they parted, and Stephenson was ignorant of the whereabouts of the *Alert*. Lieuts. Egerton and Rawson, and Peterson, started south with a dog sledge, March 12th, intending to visit the *Discovery*. On the second day Peterson became ill, and after camping he got worse.

Having a craving for cold water he left his tent during the night to procure snow to swallow, and in doing so both of his feet were badly frozen. The next day was stormy, and the officers were obliged to remain in camp; on the 15th they turned back, and reached the Alert at night. It was found necessary to amputate a portion of Petersen's feet, and he died some two months later. Another attempt made by the same officers to reach the Discovery was more successful; and on nearing the ship, March 25th, the whole crew came running toward them like rabbits from a burrow.

Before Captain Nares started north, the U. S. Government placed at his disposal all the stores left in Greenland by Captain Hall's Expedition. Toward the end of March, Lieut. Archer and Dr. Coppinger of the Discovery, with a sledge party, were sent across the channel to visit the winter quarters of the American explorers at Polaris Bay, and secure any articles of value. They found the provision depot and its contents in good order, and made a hearty supper from the bread and preserved meats. Many miscellaneous articles were scattered about, including a coil of wire, an ice-saw, a box of glass, and a small tent. The roof of the observatory was partly blown down. In all probability no human being had set foot upon the shores of this dreary bay since the crew of the Polaris departed, leaving the remains of their commander to keep watch, as it were, over the relics of his expedition.

Another object which they saw excited more painful but far deeper interest—the grave of Captain Hall. A piece of a cabin door caught the eye, and

on approaching they found upon it the following inscription:—

IN MEMORY
OF
CHARLES FRANCIS HALL,
LATE COMMANDER
U. S. STEAMER POLARIS,
NORTH POLE EXPEDITION.

DIED NOV. 8TH, 1871. AGED 50 YEARS.

“I am the resurrection and the life: he that believeth in me, though he were dead, yet shall he live.”

On the other side was engraved:—

TO THE MEMORY
OF
C. F. HALL,
LATE COMMANDER OF
U. S. NORTH POLAR EXPEDITION.
DIED NOV. 8TH, 1871.
AGED 50 YEARS.

The letters were sunk in the wood, and everything appeared in a good state of preservation. A large crowbar was stuck in the grave about a foot from the headstone, and a small flat piece of upright stone was at the foot. A willow planted near the grave by his comrades was alive and flourishing.

On the 13th of May following, Captain Stephenson and a large party again crossed to the place where Captain Hall was buried, and hoisted the American flag over the grave. At its foot they erected a brass tablet, brought from England for the purpose, with the following inscription:—

SACRED TO THE MEMORY OF
CAPTAIN C. F. HALL

Of the U. S. ship ‘POLARIS,’

Who sacrificed his life in the advancement of Science on Nov. 8, 1871.

This tablet has been erected by the British Polar Expedition of 1875, which, following in his footsteps, has profited by his experience.

As the main object of the entire expedition was to reach the North Pole or approach to it as nearly as possible, a sledging party under Commander Markham was organized, to strike out boldly upon the Palæocrystic Sea (or sea of ancient ice), as Captain Nares dubbed the regions north of Grinnell Land and Greenland, and to attain as high a latitude as possible. Another sledge party under Lieut. Aldrich was to travel westward along the north shore of Grant's Land—as the northern portion of Grinnell Land was called.

The third of April was an exciting day at the Alert's winter quarters. Early in the morning fifty-one officers and men, forming the northern and western sledging parties with their supports, arranged themselves and their sledges in line of battle, all in high spirits and good health, weary of the winter's inactivity and anxious for the novel work before them. On starting they were accompanied a short distance by Captain Nares and the few shipmates they were to leave behind; then cheers were exchanged, and the explorers disappeared in the north. The two sledging parties traveled together over the rugged floes in a north-westerly direction for several days, making slow progress, and on the 10th of April reached View Hill on the north-eastern corner of Grinnell Land where a depot of provisions had previously been established. Here the supporting party turned back and the exploring parties separated—Aldrich to travel westward, and Markham to strike due north over the frozen sea.

Markham's party, consisting of himself, Lieut. Parr, and fifteen men, drew three sledges loaded with two

boats and provisions for sixty-three days, and weighing together over 6000 lbs., which was a pull of 400 lbs. for each of the crew. Their course on the first day was through hummocks so high that a part of the men were continually in advance with pickaxes and shovels making roads, over which the sledges were dragged by repeated journeys. "Standing pulls," as they were called, were often necessary through the whole journey, when all the men grasped the ropes firmly, and at the words of command, "one, two, three, haul," pulled together, thus advancing the sledge a few feet at a time.

At times there were hard gales and drifting snow, when traveling was impossible and the men had to stay in their tents. At other times, when the sun shone brightly, the surface snow on the floes sparkled and glistened with the most beautiful iridescent colors. Symptoms of scurvy appeared soon after starting, and on the 17th of April two of the men were so ill that they had to be drawn on a sledge.

On the 18th of April a change was experienced in the nature of the ice. Hitherto the floes though small were comparatively flat and surrounded by hummocks; now they appeared squeezed one against the other but with no hummocks between. They were of gigantic thickness, of uneven surfaces, and covered with deep snow. In a journey of ten hours, though ten miles were marched, only one mile of progress was made. On the next day some of the floes were nine or ten feet above the level of the next, and the sledges had to be raised or lowered from one to the other. In four hours, with a succession of standing pulls, only 300 yards of an advance was made; and to lighten the load the largest ice boat was abandoned.

Subsequently there was a little improvement in the traveling, but it soon grew worse than ever before. Enormous hummocks were squeezed together on every side, and from the summit of one rising more than forty feet above the snow at its base, no floe could be seen—nothing but uneven ranges of shapeless masses of ice, between which the snow had accumulated in drifted and surface-frozen ridges to a great depth. Pickaxes and shovels were in constant requisition; while the road-makers were at work the others frequently shivered in their tents. The keen winds were sometimes utilized by means of sails which were hoisted on the sledges. The tracks of a hare traveling south seventeen miles from the nearest land, were the last vestige of animal life seen on the northward journey.

By the 2nd of May five of the crew were on the sick list, and by the 7th the whole five had to be placed on the sledges; others suffered from snow-blindness. On the 10th, four more men were taken ill; the condition of the ice showed no improvement, half of the provisions were exhausted, and Markham came to the conclusion that he could go no further; but he determined to remain where he was a couple of days to make observations.

The next day the men cut a hole through some young ice, and it was found to be sixty-four inches thick, though the growth of only one season. The depth of water beneath was 72 fathoms, or 432 feet, and the bottom was clay. Though the scenery above was appallingly desolate, with not a trace of animal or vegetable existence, the very reverse was the case below. A dredge was improvised, baited, and lowered in the water. On being raised it was found to be literally

swarming with crustaceans apparently of two kinds. Experiments showed that tidal movements existed. The following is from Markham's journal of May 13th—the last day passed at this station, the highest latitude yet attained by man:—

“Breakfasted at 8.30, immediately after which, leaving the cooks behind at the camp to attend upon the invalids, the remainder of the party, carrying the sextant and artificial horizon, and also the sledge, banners and colors, started northward. We had some very severe walking, struggling through snow up to our waists, and, occasionally, almost disappearing through cracks and fissures, until twenty minutes to noon, when a halt was called. The artificial horizon was then set up, and the flags and banners displayed. These fluttered out bravely before a fresh S. W. wind, which latter was, however, decidedly cold and unpleasant. At noon we obtained a good altitude, and proclaimed our latitude to be $83^{\circ} 20' 26''$ N., exactly 399½ miles from the North Pole. On this being duly announced, three cheers were given; then the whole party, in the exuberance of their spirits at having reached their turning point, sang the “Union Jack of Old England,” the “Grand Palæocrystic Sledging Chorus,” winding up, like loyal subjects, with “God save the Queen.” These little demonstrations had the effect of cheering the men who, nevertheless, enjoy good spirits (*sic.*). The instruments were then packed, the colors furled, and our steps retraced to the camp. On our arrival the flags were hoisted on our tents and sledges, and kept flying for the remainder of the day. A magnum of whisky that had been sent by the Dean of Dundee for the express purpose of being consumed in the highest northern latitude, was produced, and a glass of grog served out to all. After supper a cigar was issued to each man, and the day was brought to a close with songs, even the invalids joining in. All seemed happy, cheerful and contented.”

Toward evening the travelers turned their faces from the North Pole and started south. The return journey resembled in many respects the journey north, but there was not so much road-making to be done

as they followed their old tracks as far as possible. When the days were dull and cloudy—and they frequently were—sky and sea appeared all one, and objects could not be seen further than a few yards. The invalids grew worse, but could have no medicine as the lime-juice was exhausted; and the appetites of all were diminishing daily. They hurried on toward the provision depot as fast as possible; but it was slow work, for “out of thirty-four legs in the party only five were sound.” The second boat was soon abandoned.

Some little incidents enlivened the tedium of the route. On the 24th—Victoria’s birth-day—“the colors were displayed at lunch time, the main-brace spliced, and Her Majesty’s health drank by her most northern though not less loyal subjects.” Much interest was occasioned one day by the appearance of a little snow-bunting, which fluttered around and chirped for a few minutes and then flew away toward land. Many of the party had not seen a bird for nine months, and the sick men on the sledges uncovered their heads to obtain a glimpse of the little warbler.

At length, June 4th, they arrived at the depot at View Hill, and found letters from Captain Nares who had been there the day before. Three hares which he left and a supply of groceries were most welcome.

When again on the road, June 6th, their appearance was pitiable. A few men were pulling at the ropes, two of whom were ready to drop out of the line at any moment from weakness; others were struggling on behind, and obliged to lie down and rest every hundred yards; the remainder were lying helpless on the sledges. It seemed unlikely that they would ever

reach the Alert, forty miles distant, without aid, and Lieut. Parr volunteered to go on alone and procure it; he started off, lightly equipped, on the morning of June 7th.

On the next day one of Markham's men died. A grave eight feet deep was dug in the ice, and at 9 p. m., with ensign at half-mast and the Union Jack as a pall, the funeral procession, attended by all but four men who were very ill, moved thither; the burial service was read, and the remains consigned to their icy resting-place. A rude cross was placed at the head of the grave, with the following inscription:—"Beneath this cross lie buried the remains of George Porter, R. M. A., who died on June 8th, 1876. Thy will be done."

The journey was resumed on the 9th, and at about 11 p. m. an object was described moving rapidly among the hummocks; it was a dog team. The colors were hoisted, but the men overcome by their feelings, could hardly raise a cheer. Well and faithfully had Parr redeemed his promise. He reached the Alert at 6 p. m. on the 8th, and Dr. Moss and Lieut. May started at once with a dog sledge and medicine and food.

Greatly refreshed and encouraged the party marched on the next day, and soon met Captain Nares and a number of men. The new-comers took charge of the sledges and invalids and started south, but Markham and a few of his comrades stuck to their ropes until the Alert was reached, June 14th, after an absence of seventy-two days.

The number of English miles actually traveled by the North Pole party in going and returning was 601;

and yet they only attained a distance of 73 miles from the ship, and about 30 miles from the nearest land. It must be remembered that almost every mile of advance involved several miles of laborious traveling.

The western exploring party of seven men under Lieut. Aldrich, after separating from Markham at View Hill, April 11th, started westward to explore the north shore of Grinnell Land. The motto was "*Fortitudo Vincet*," and bravely was it exemplified during the journey. At the start they struck inland across Cape Joseph Henry, and on the 15th reached James Ross Bay. The course was then northwesterly along the shore of the circumpolar sea. A supporting sledge accompanied Aldrich as far as Giffard Point, and turned back April 25th. The snow was deep and traveling very laborious and slow.

On the 1st of May, Aldrich reached a lofty peak shaped like a sugar loaf, 1800 feet in height, draped in eternal white, and terminating in a promontory rising 800 feet almost perpendicularly from the sea. This promontory was in latitude $83^{\circ} 71'$ north, and longitude $70^{\circ} 10'$ west—the most northerly land that has ever been visited by man. Its general appearance was worthy of its position, and it has been appropriately named Cape Columbia. The travelers camped at its base, on a hard snow-drift twelve feet deep.

Aldrich continued on in a westerly and then in a south-westerly direction along the coast until May 18th, when he reached the limit of his journey. He was then in Yelverton Bay, in latitude $82^{\circ} 16'$ north, and longitude $85^{\circ} 33'$ west, and 270 miles from the Alert. The coast trended to the south, and nothing could be seen to the north and west but a sea of hum-

mocks. All was dreary solitude, with no stir of animal life and nothing to relieve the dead monotony of white.

The explorers turned back May 19th; most of them were suffering from scurvy, and traveling was painful and tedious. One month later, when near View Hill, they were met by a relief party with much-needed supplies. They reached the Alert June 25th, after an absence of eighty-two days, during which time they had traveled 708 miles.

The coast line of Grant Land consists of a steep shore, with many promontories, peninsulas, and indentations. The cliffs vary in height from 300 to 1000 feet. The interior contains many elevated summits which do not seem to form continuous chains; those farthest to the west were called Challenger Mountains.

The exploration of the northern shores of Greenland was assigned to Lieut. Beaumont of the Discovery. He left his ship April 6th, proceeded to the Alert, and on the 20th started eastward across Robeson Channel. He was accompanied by Lieut. Rawson, and had fourteen men and two sledges. He reached Repulse Harbor, April 27th, and then traveled north easterly on the sea ice through drifted snows, as the rugged cliffs and ice of the shore made it impossible to travel on land. Progress was distressingly slow.

On the 4th of May they reached Stanton Cape, beyond which was a fine bay surrounded by cliffs. Soon afterward James Hand, one of the crew, was attacked by scurvy, and on the 11th of May, when near Cape Bryant, Rawson turned back with one sledge carrying the sick man. Beaumont continued on through deep snow until May 21st, when he too was

obliged to turn back. His men were suffering greatly from scurvy, and two of them had to be carried.

On the 12th of June, Beaumont's party arrived at Repulse Harbor. Then they started for the Alert; but being stopped by open water they struck for Polaris Bay; and on the 25th, when wearily wending their way across Polaris Promontory toward Thank God Harbor, they were delighted to meet Dr. Coppinger, Rawson and Hans with a dog team. A halt was ordered, and the Doctor attended to the sick and supplied them with lime-juice, etc.

Rawson's report was not a very pleasing one. After parting with Beaumont, May 13th, he had struggled southward to Thank God Harbor, where Hand died early in June. On the 7th, Dr. Coppinger's party arrived from the Discovery, and were much surprised to find who was there and to learn the sad news. On the next day they buried their dead comrade near the grave of Captain Hall.

On the 28th of June, Dr. Coppinger with the dog sledge took two of the sick men to the depot at Polaris Bay, but for one of them rest and relief came too late. Paul died on the 29th, and was buried beside his comrade Hand. The sledge flags were half-mast high and three volleys were fired over their graves.

The remainder of Beaumont's party were brought on by the dog team July 1st. Hans caught seals, whose flesh was most beneficial for the sick men, and several ducks and geese were shot. Messengers were sent to the Discovery, and on the 19th, Captain Stephenson and six men arrived bearing all the medical comforts at their command. The sick men recovered rapidly, and on the 8th of August a final

adieu was bidden to Thank God Harbor. The ice was beginning to break up, and the passage across the channel tedious and difficult; it was often necessary to cross open water from one drifting floe to another in the ice boat. Finally, the travelers reached Discovery Harbor, August 14th, and saw the Alert (which had been released from the ice July 31st) moored near their own ship. Beaumont's party had been absent about 132 days, during which they had traveled 453 miles; the highest latitude he reached was lower than that where the Alert wintered.

The explorers reached England near the close of October, and were enthusiastically welcomed. Many of the officers were promoted to higher ranks in the navy, and Captain Nares received the honor of knighthood.

During the absence of the expedition, Captain Allen Young was deputed by the Admiralty to visit the northern seas, and give any aid that he could to the explorers. He left England, May 1876, in his yacht Pandora, and cruised about the northern part of Baffin's Bay, but saw no signs of the Expedition.

CHAPTER LIII.

NORDENSKIOLD'S NORTH-EAST PASSAGE EXPEDITION, 1878—80.

ADOLF ERIK NORDENSKIOLD the veteran Arctic explorer who has recently acquired additional fame by making a voyage from Europe to Asia through the northern seas—thus discovering the long-sought North-east Passage, was born at Helsingfors, the capital of Finland, Nov, 18th, 1832. The race from which he sprang has long been noted for the possession of remarkable qualities, among which an ardent love of nature and of scientific research was prominent. In 1710, one of his ancestors, hearing that the plague had broken out all over Finland, protected himself against the epidemic in a very peculiar way. He loaded a vessel with provisions and other supplies, went on board with all his family, and cruised about in the open sea for several months, taking care to have no communication with the land.

Nordenskiold's father was a well-known naturalist, chief of the mining department of Finland; his son often accompanied him in mineralogical excursions and thereby acquired skill in recognizing and collecting minerals, and in the use of the blowpipe. When, in 1849, he entered the University of Helsingfors, he devoted himself largely to the study of chemistry,

mineralogy and geology; and he continued his scientific researches in after life.

In 1857 he left Finland in consequence of political trouble with the Governor General, and was not permitted to return to his native land until the displacement, in 1862, of the official whom he had innocently offended. In 1858 he made his first Arctic voyage as geologist of Torell's expedition to Spitzbergen, and on his return he was appointed Professor and Intendant of the mineralogical department of the Riksmuseum at Stockholm. In 1861 and subsequently he was connected with several Arctic expeditions, some of which have been described in a previous chapter.

After the exploration of the Kara Sea, and the voyages to the great Siberian rivers, in 1875 and 1876, it was natural that Nordenskiöld should turn a longing eye to the unexplored sea skirting the northern coast of Asia, and that the old enterprise of effecting a North-east passage to Asia should be revived.

Nordenskiöld's new expedition was planned on a larger scale than any of his previous ones. The cost thereof was estimated at £20,000, to which sum Mr. Oscar Dickson, the King of Sweden, and Mr. A. Sibiriakoff were the principal contributors. The bark-rigged whale-steamer *Vega*, built of oak, 150 feet long over deck, with a breadth of 29 feet in the widest place and a depth in the hold of 16 feet, was bought for the expedition. The crew consisted of 18 seamen of the Swedish navy, selected from 200 who volunteered their services, and three Norwegian walrus-hunters.

In this memorable expedition Nordenskiöld was accompanied by Lieut. A. A. L. Palander, commander

of the *Vega*, and Lieut. Brusewitz, second in command—both officers of the Swedish navy; Dr. Kjellman, botanist; Dr. Stuxberg, geologist; and Dr. A. Penguist, medical officer. By special request of their respective governments, Lieut. Bove of the Italian navy, Lieut. Hovgaard of the Danish navy, and Lieut. Nordquist of the Imperial Russian family's battalion of sharpshooters also joined in the expedition.

The *Vega* was accompanied part of her voyage by three other vessels; as far as the mouth of the Yenisei by the steamer *Fraser* and the sailing vessel *Empress*, laden with coal, salt, tobacco and iron; and as far as the mouth of the *Lena* by a small steamer of the same name, commanded by Captain Johannesen.

The explorers left Tromso, July 21st, 1878. Nova Zembla was sighted on the 29th, and on the 30th the *Vega*, having steamed along the coast to Jugor Straits, anchored at a Samoyede village. Here some household articles, dresses &c., were purchased of the inhabitants, and one old woman was persuaded to sell some of the idols which are worshipped by the tribe, although they are professedly Christians, and take part in Christian worship. The idols were all different in appearance. One consisted of a stone, which by the help of brightly-colored patches had been made into a sort of doll; another was a similar doll with a piece of copper plate for a face; and a third was a little skin doll ornamented with ear-rings and pearls. These idols, which are still regarded with reverence by the Samoyedes, in general resemble the rag dolls which peasant children make for themselves without the help of the toy shops of towns.

The following day the vessels of the expedition pass-

ed through Jugor Straits into the Kara Sea, and on the 6th of August all were anchored in Dickson Harbor at the mouth of the Yenisei. The Fraser and Express subsequently ascended the river some 500 miles, and returned home with full cargoes of wheat, rye, oats and tallow.

On the 10th of August the Vega and Lena resumed their eastward voyage and on the next day fell in with bay ice, which did not, however, impede navigation. From the 14th to the 18th of August the vessels lay at anchor, waiting for clear weather, in a splendid harbor situated in the strait between Taimyr Island and the mainland, which was named Actinia Haven from the number of *actinia* which the dredge brought up from the bottom. The land was free of snow and covered with a grey-green vegetation consisting of grasses, mosses and lichens.

On the 19th the vessels continued their course along the coast of the Chelyuskin Peninsula, through a dense fog, which occasionally lightened up so that the contour of the land could be distinguished. They steamed past an extensive field of unbroken ice occupying a bay on the western side of the peninsula, and at length an ice-free promontory glinted out through the fog in the north-east. In a short time the Vega and Lena were anchored in a little bay, open to the north and ice-free, that cuts the promontory in two. Flags were hoisted and a salute fired. The first object of the voyage had been attained—the northernmost point of the old world, variously called Cape Chelyuskin, Cape Severo, and North-east Cape.

The air had cleared and the cape lay before them lighted up by the sun and free from snow. A large

Polar bear was seen parading the beach with eyes and nose turned toward the bay to inspect the new arrival ; frightened by their salute it took to flight and escaped the balls of the Swedes.

Cape Chelyuskin forms a low promontory, divided into two parts by the bay in which the vessels had anchored. The most northern point is in $77^{\circ} 41'$ north latitude. Inland the mountains appeared to rise gradually to a height of 1000 feet.

At noon on the 20th the vessels sailed on, meeting with much drift-ice, and the floes soon increased in size till progress through them was almost impossible. Open water was again reached on the 23rd, and with a fresh breeze the vessels moved rapidly along without the aid of steam over a perfectly smooth sea. High, picturesque mountains were seen inland. On the 24th, Preobrasehenski Island at the mouth of the Chatanga was sighted ; this island was found to be of chalk formation.

On arriving at the mouth of the Lena, a favorable wind and an open sea induced Nordenskiöld to continue on without stopping, and the Vega and the Lena accordingly parted on the night between the 27th and 28th of August—the former to sail direct to Fadeyev, one of the New Siberian Islands, the latter to ascend the Lena.

A pilot had been engaged to descend the Lena and await the arrival of the vessel, but Captain Johannesen could discover no flag-staff or signal tower; and was left to his own resources. He took his vessel safely through the delta of the river, and ascended the river to Yakutsk, where he arrived the 21st of September. Despatches from Nordenskiöld were sent on to Irkutsk

and a telegram from that town on the 16th of October, announced to the civilized world the rounding of Cape Chelyuskin, and the navigation of the Lena by a steamer from the Atlantic.

When Nordenskiöld parted from the Lena he hoped to reach Bering's Straits by the end of September; but weeks and months passed, and nothing was heard of the Vega until December, when two American whalers, returned from St. Lawrence Bay, reported that they had been informed by two trust-worthy natives, that they had seen a Russian war-ship frozen in north of East Cape, some forty miles from land. This vessel, supposed by the natives to be Russian, was immediately identified as the Vega, and a lively but unnecessary concern for the safety of the explorers was generally felt. Months again passed without further intelligence, when, in the middle of May, 1879, dispatches were received from the expedition with information that the Vega was frozen in at a distance of 120 miles from Bering's Straits. Meantime, Mr. A. Sibriakoff had started to search for the explorers in the steamer "Nordenskiöld."

After parting from the Lena the Vega steered in a north-easterly direction toward the New Siberian Islands, and on the 31st of August passed through the sound which separates the most southerly one from the mainland. Eastward there was an open channel along the coast; continuous ice-fields stretched away to the northward.

Cape Chelagskoj was reached Sept. 6th, and here were met the first natives seen since leaving Jugor Straits. A halt was made, and two boat-loads came on board. Their language was unintelligible, except-

ing that one boy could count ten in English. After this the explorers were in daily communication with the inhabitants along the coast.

On the 7th of Sept. progress forward was impossible, and Nordenskiöld and his comrades landed at the invitation of the natives, who received them in a very friendly manner, and offered whatever the dwellings contained. Food was abundant, and in one tent reindeer flesh was boiling in a large cast-iron pot. Children were plenty, and were well-treated and healthy. When carried about on the shoulders of the men and women they were wrapped up in furs, but inside of the tents they were completely naked, and would sometimes run out doors in that condition.

On the 11th the Vega proceeded on her voyage, but on the 12th was obliged to anchor again near the point of a promontory on which was a village of eighteen tents. On the 18th the Vega again started, making slow progress and frequent stops, and by the 28th was firmly frozen in.

The winter-harbor was situated 120 miles from Bering's Straits, one mile from land, and in the immediate neighborhood of three tent villages called Yintlen, Pitlekajo, and Irigononk, and at a point frequently visited by vessels from the Pacific.

"When we were frozen in," says Nordenskiöld, "there was ice-free water some minutes farther east. A single hour's steaming of the Vega at full speed had probably been sufficient to traverse this distance, and a day earlier the drift-ice at this point would not have formed any serious obstacle to the advance of the vessel."

"During the month of October the ice had increased so much in strength that a house of ice was built on shore, with the view of making magnetical observations there. A tent was now drawn

over the ship, the rigging having been lowered, and a thick covering of snow was laid on the deck, while other necessary preparations to lessen the effects of an Arctic winter were made. Every Saturday evening lectures were delivered on suitable subjects. In the cabins of the officers and the crew, as well as in the middle deck, lamps were kept burning all day long. On no occasion was daylight quite wanting, and even on the shortest day, although the sun did not rise above the horizon, there was a couple of hours' daylight. The sport during the winter was very poor. The bears kept away, wolves were seen but could not be got at, and the hares and ptarmigans being white were very difficult to shoot on the snow; but during the spring the sport became excellent. The gales were especially violent during the months of October and November, and the blocks of ice rose to a height of some fifteen yards.

"All the way from Cape Chelagskoj the coast is thickly studded with villages, consisting each of from five to fifteen tents, inhabited by Tchuktches, a tribe doubtless descended from the Eskimo of Greenland. These tents are roomy, and inclose one or two sleeping places, which form, as it were, a special inner tent of warm reindeer skin, which is heated and lighted by a train-oil lamp. In summer, but not in winter, a wood fire is kept up in the middle of the exterior tent, an opening being made in the top of it for the escape of the smoke.

"In the inner tent the women go quite naked with the exception of a narrow girdle. They wear their hair long, parted at the top, and braided. They are tattooed with two dark-blue lines bent inwards on either side of the face.

"The men generally have the hair shaved or clipped to the root with the exception of the outer margin, which is left an inch long and combed over the face. They are sometimes painted with a black right-angled cross placed obliquely on the cheek bone.

"The Tchuktche has black hair and eyes, a brownish-yellow skin, and is small of stature. He is very friendly and serviceable, especially if he gets 'kakan,' a common expression for all kinds of food. He will do almost anything for a drop of brandy. He is a shrewd and calculating man of business, and has been accustomed to it from childhood through the barter which is

carried on between America and Siberia. Many a beaver-skin that comes to the market at Irbit belongs to an animal that has been caught in America, whose skin has since gone from hand to hand among the wild men until it has at length reached the Russian merchant.

“The natives live by fishing, including whale fishing, and hunting the seal and walrus. They are dressed in reindeer skins, with which they also cover their tents, procuring them by barter with the nomad portion of the population of the Tchuktche Peninsula, the so-called Reindeer-Tchuktches, who carry on the breeding of reindeer and wander from place to place. During winter, when fishing is impossible, the coast Tchuktches travel along the coast with dog-sledges and carry on barter with the natives of other villages.”

The time during which the Vega was frozen in was passed by the explorers without any extraordinary incident. There was but little sickness among them, and no one died. Scientific investigations were kept up, and at the observatory one of the officers and two of the crew were on constant duty.

Nordenskiöld devoted much attention to the observation and registration of auroral phenomena. The season was a minimum one for such appearances and sun spots. During the winter he did not once observe that the Northern Lights attained the magnificent development acquired by them in Scandinavia. But whenever the sky was clear, and there was no sun or moon, he saw, constant in the northeast horizon, and always in the same exact spot, a faintly luminous arc so motionless as to be susceptible of accurate measurement. This phenomenon, Nordenskiöld concludes, comes from an actual aureole, or ring of light, surrounding the northern portion of the globe-gilding the whole of North America with an enduring glory. Its centre should be the spot where Hall wintered, and its radius about eight degrees.

The ship was a constant rendezvous for the natives, many of whom passed that way on their travels or simply came to gratify their curiosity. All of them went on board and were hospitably entertained, for which they appeared grateful and always friendly. By studying their language the explorers, assisted by pantomime, were able after a while to get along fairly in the way of conversation with them. Among the visitors was Warili Menka, a Christian Tschuktscher, whom the Russian government had appointed chief over all the Tschuktschers. He took away letters from the explorers, which subsequently reached their destination.

At length, after 264 days detention in the ice, the *Vega* was released on the 18th of July, and immediately resumed the voyage eastward. Bering's Straits were quickly entered, Port Clarence on the American side of the straits, Bering Island, and several other places were visited, and then the explorers headed for Yokohama, Japan, where they arrived Sept. 2nd. Here a grand banquet was given to them by the learned societies of Tokio and Yokohama, and they were received by the emperor at his palace.

Leaving Yokohama, the explorers started homeward by the way of the Suez Canal, and were most enthusiastically received wherever they halted on the way. They arrived at Sweden about the middle of April, 1880.

CHAPTER LIV.

THE AMERICAN ARCTIC EXPEDITION OF 1879.

THE American Arctic Expedition of 1879, which departed from San Francisco on the 8th of July, was projected by James Gordon Bennett, proprietor of the New York Herald. After the return of the last of the two successful expeditions which he had sent to Africa under Henry M. Stanley, he longed for new worlds to conquer and turned his attention to the Frozen Zone.

Mr. Bennett decided to send out, at his own expense, an expedition to attempt to reach the North Pole by way of Bering's Straits, and he subsequently bought the Pandora, the English craft mentioned on page 816. By special acts of Congress the vessel was allowed to sail under American colors, to assume a new name—the Jeannette—and to be navigated by officers of the United States Navy, with all the rights and privileges of a government ship. She was taken through the Straits of Magellan to San Francisco by Lieut. George W. DeLong, and there turned over to the naval authorities at Mare Island, to be put in order for the northern voyage.

The Jeannette was built in England in 1862. She is a bark-rigged steam yacht of 420 tons burden, with

an engine of 200 horse power and a wide spread of canvas. She was constructed for service in the ice, and in 1873 conveyed her owner to the Arctic regions for the purpose of searching for records of Franklin's expedition.

While at Mare Island important repairs and improvements were made in the ship. Her hull was strengthened by bracing, new boilers were put in, together with all kinds of machinery that might possibly be of use. The cabin and forecastle were padded with layers of felt to keep out the cold, and the poop deck was covered with several thicknesses of stout painted canvas. Boats, tents, extra sails, two extra propellers, extra pumps, a distilling apparatus, a hoisting engine rigged on the spar deck to be employed in warping, and everything that could be devised to give safety to the explorers and efficiency to the expedition were provided.

The officers and crew of the Jeannette were as follows:—

Lieut. George W. DeLong, U. S. N., Commander.

Lieut. Charles W. Chipp, U. S. N., Executive Officer.

Lieut. John W. Dannheimer, U. S. N., Navigator.

George W. Melville, U. S. N., Chief Engineer.

J. M. M. Ambler, U. S. N., Surgeon. Jerome J. Collins, Meteorologist.

Raymond L. Newcomb, Naturalist. William M. Dunbar, Ice Pilot.

Wm. Linderman, Alfred Sweetmann, Carpenters. Walter Lee, Machinist.

Wm. Cole, Boatwain. G. W. Boyd, I. Iverson, Geo. Landerbauch, Firemen.

Louis Noras, Herbert W. Leach, Henry D. Warner, James H. Bartlett, Geo. Stephenson, Adolph Dressler, Carl A. Gortz, Peter E. Johnson, Henry Wilson, Edward Star, Hans H. Erickson, H. H. Knack, Albert G. Knihue, Seamen. Sam, Tong Sing, and Ah Sing, Chinese cook, steward, and cabin boy.

Lieuts. DeLong and Chipp were officers of the U. S. steamer Juniata on her northern cruise in search of the crew of the lost Polaris. (See page 770). Mr. Melville was engineer of the steamer Tigress when she went north on the same errand. William Linder-

man was a member of the Polaris ice-drift party. All of the crew were volunteers, selected with great care from many applicants.

A complimentary reception was given by the California Academy of Sciences to the officers of the *Jeannette*, a few days before their departure. The meeting was largely attended, and many eminent scientists of the Pacific Coast were present. Speeches were made by Dr. Baehr, J. P. Moore, Charles W. Brooks, William Bradford, J. J. Collins of the expedition, and others. Dr. A. B. Stout read a very elaborate and exhaustive paper on Arctic discovery, and in closing said:—"May prosperous gales speed the *Jeanette* on her mission, and when her destined voyage has achieved its good intent, may her safe return, laden as she will be with a rich cargo of scientific lore, be a thing of certainty. To those noble and daring hearts that tread her deck we give our ardent 'God speed you!' and utter for them our earnest prayer, 'God bless you and protect you!'" In response to an invitation to address the audience Lieut. DeLong spoke as follows:—

"When the officers of the expedition which I have the honor to command were invited to be present this evening to listen to the discussion of the Arctic problem, I replied for them and myself that nothing would give us greater pleasure than to be present. At the same time, however, I asked that we might be excused from any active participation in the discussion until after our return from within the Arctic Circle. This humble peculiarity of ours, it would seem, is not to be tolerated, and however unfit I am to reply with any degree of propriety to the very kind remarks that have been made to us this evening, it seems that it is one of the duties that is forced upon the commander of the expedition, as well as a great many other duties. As far as

this part of the expedition is concerned, there is really very little to say. By the act of Congress it has been placed under the charge of naval officers, and it has, since the passage of the act of Congress, received the fostering care and encouragement of the Navy Department. It is peculiar as being the first expedition fitted out to penetrate the highest regions of the north by way of Bering's Straits. Ships have heretofore passed through Bering's Straits, rounding Point Barrow, and going to the northward to rescue and relieve Sir John Franklin; but this is the first purely Polar expedition that has ever been despatched by way of Bering's Straits.

"I dare say that after we have left San Francisco in our passage to the northern seas we shall experience very much the same difficulties and hardships and trials that have been experienced by everybody who has gone before us. It is one of the most difficult things—in fact, it is an impossible thing—for one starting out on an expedition of this kind to say in advance what he is going to do. The ground which we are going to traverse is an entirely new one. After reaching the seventy-first parallel of latitude we go out into a great blank space, which we are going to endeavor to delineate and to determine whether it is water or land or ice. You will excuse me, therefore, from attempting to explain what we are going to do. If you will be kind enough to keep us in memory while we are gone we will attempt to tell you what we have done on our return, which, I dare say, will be more interesting than attempting to tell you what we hope to do. I can only return to you my sincere thanks for the kind reception you have given us and for the interest you manifest in our peculiar undertaking."

On the 30th of June the San Francisco Chamber of Commerce, specially convened for the purpose of expressing the deep interest felt in the expedition by that body, adopted the following resolutions:—

"Whereas the San Francisco Chamber of Commerce is desirous of expressing its deep interest and good will toward all measures calculated to forward and extend any scientific explorations likely to benefit the commerce, navigation or agricultural interests of our country; therefore, on behalf of the mercantile

industry of the Pacific slope of the United States of America, be it

Resolved.—That we earnestly offer our cheering words of hearty approval to encourage the well-planned American Arctic Expedition about to prosecute from our Pacific coast a continuance of that noble work of Polar exploration so gallantly inaugurated and fearlessly advanced by the nations bordering on the Atlantic. On behalf of our city, as a future seat of national wealth and extended commerce, we desire to foster scientific enlightenment, and this Chamber views with marked interest an enterprise of national importance, sailing from its Golden Gate, fully equipped with a picked band of brave and resolute men possessed of Arctic experience, whom we feel are capable of winning a successful and glorious record for the nation whose banner floats over them and whose blessing goes with them. While recognizing with admiration the fact that this expedition is wholly paid for and supported by private munificence, we rejoice that this enterprise is officially endorsed by the United States government, who accord it the national rights necessary to proper discipline, and the suitable dignity intrusted by a great and growing nation whose knowledge it will increase and to whose honor it will redound. As a national work it will extend the geographical survey and topographical knowledge of our northern boundary; in the interest of commerce, navigation and national agriculture it may determine laws of meteorology, hydrography, astronomy, and gravitation, reveal ocean currents, develop new fisheries, discover lands and people hitherto unknown; and by extending the world's knowledge of such fundamental principles of earth life as magnetism and electricity and various collateral branches of atmospheric science solve great problems important to our common humanity.

Resolved.—That as the well-merited offering of an appreciative nation, our people would most heartily approve of and endorse the use of a national vessel to convoy the Jeannette to her most northern port of departure, whence, leaving the shores of solemn pine, she will traverse the northern seas alone, followed by the earnest hopes of friends to progress and the world of science.

Resolved.—That we tender to her brave and accomplished commander, Lieutenant George W. DeLong, United States

Navy, to his efficient staff of able specialists in various departments of science, and to his hardy and gallant crew, one and all, our hearty good wishes for their safe return and for the entire success of the American Arctic Expedition from the Pacific.

The departure of the Jeannette from San Francisco, on the 8th of July 1879, was a notable event in the history of that city. As the vessel moved slowly toward the Golden Gate, the friendly waving of hats and handkerchiefs from the wharves, the shipping, and Telegraph Hill, told the explorers that the good people of the city as well as the men of the sea, were giving them a hearty send-off. A salute of ten guns fired from Fort Point greeted them at the Narrows, and several steamboats crowded with spectators, and the white-sailed craft of the San Francisco Yacht Club, convoyed the Jeannette till she was out on the bosom of the broad Pacific and fairly started on her voyage to the unknown north.

The Jeannette proceeded direct to Ounalaska, one of the Aleutian Islands, and anchored in the harbor of Illiouliouk. This place is the headquarters of the Alaska Commercial Company, and its agent, Mr. Greenbaim, and other officials, showed the explorers much kindness and attention.

On the 6th of August the Jeannette resumed her course, and on the 12th of August anchored opposite the little settlement and blockhouse known by Americans as St. Michael's, Alaska, and by Russians as Michaelovski. Here the explorers were welcomed by Mr. Newmann, agent of the Alaska Commercial Company, and by Mr. Nelson, an employe of the Smithsonian Institution and observer of the U. S. Signal Service, who are philosophical enough to live content-

edly in this isolated position. A drove of dogs were taken on board at this place, and two native Alaskans were hired to accompany the expedition as dog-drivers and hunters.

On the 18th of August the schooner Fanny A. Hyde, which was to convey coal and extra stores for the expedition as far as St. Lawrence Bay, arrived from San Francisco, and on the evening of the 21st both vessels resumed the voyage northward. As they started out, the guns at the old Russian fort and at the agency of the Western Fur and Trading Company belched forth a parting salute.

On the 25th the Jeannette arrived at the harbor in St. Lawrence Bay, East Siberia, some 30 miles south of East Cape, and the schooner arrived the next day. From this point the Jeannette continued her journey alone. In September she was seen by whalers, pursuing her lonely voyage. Just before starting from St. Lawrence Bay, Mr. Collins, as special correspondent of the New York Herald, wrote to that journal as follows :

“All before us now is uncertainty, because our movements will be governed by circumstances over which we can have no control. If, as I telegraphed, the search for Nordenskiöld is now needless, we will try and reach Wrangel Land and find a winter harbor on that new land, on which, we believe, the white man has not yet put his foot. At the worst, we may winter in Siberia and “go for” the Wrangel Land mystery next spring. I am in great hopes we will reach there this season.

“We are amply supplied with fur clothing and provisions, so that we can feed and keep warm in any event for some time. Our dogs will enable us to make explorations to considerable distances from the ship and determine the character of the country. Feeling that we have the sympathy of all we left at home, we go North, trusting in God’s protection and our good fortune. Farewell.”

834 MISSING WHALERS—THE RELIEF STEAMER CORWIN.

In the autumn of 1879, two whaling boats, the Mount Wollaston and Vigilant—which, with a score of others, left San Francisco in the spring—failed to return, and were reported as having been seen imprisoned in the ice north of Bering's Straits, Oct. 20th, by Captain Campbell whose ship was the last that succeeded in getting away.

Much concern for the safety of the missing barks was felt in San Francisco, and the following petition was addressed to the Secretary of the Navy:—

SIR—The undersigned, merchants and citizens of San Francisco, being of a belief that the situation of the Steamer Jeannette and the whaling barks Mount Wollaston and Vigilant, now in the Arctic Ocean, is one of extreme danger, would most respectfully petition that as soon as navigation opens in the spring, a government vessel may be sent to relieve them and afford them assistance in saving the lives and alleviate the sufferings of the officers and crews of the above named vessels.

The naming of the Jeannette with the whalers was justified by the petitioners on the opinion of returned whalers, that the vessel did not succeed in reaching Wrangell Land, owing to the early formation of ice last season.

The Secretary of the Navy subsequently decided to send the revenue steamer Corwin on a trip northward to search for the absent vessels, and render them and their crews any possible needed assistance. Captain Hooker, of the Corwin, was also instructed to cruise in the waters of Alaska for the enforcement of the U. S. Revenue laws, and to protect the interests of the government, and perform other duties of a scientific and humane nature.

The Corwin sailed from San Francisco on her mission of good-will, May 22nd, 1880.

